E-Government for Sustainable Development in SIDS

United Nations Project Office on Governance (UNPOG)  
DPADM/UNDESA

Mr. Jae-hong Lim  
Head of UNPOG
AGENDA

1. UNPOG and SIDS


3. UNPOG’s Activities for SIDS
   A. Review of Past Activities
   B. Research on E-Government Development in SIDS
   C. Policy Recommendations

4. Way Forward
UNPOG and SIDS
Establishment

May 2005
Seoul Declaration -
6th Global Forum on Reinventing Government

June 2006
Technical Cooperation and Trust Fund Agreement
with MOGAHA of ROK

Officially launched in September 2006
Vision and Mission

GLOBAL HUB FOR GOOD GOVERNANCE
THROUGH E-GOVERNMENT
FOCUSING ON ASIA-PACIFIC REGION

Assist Member States, in particular developing and least developed countries, to improve their governance capacity through innovation, e-governance and ICT for sustainable development
Why for SIDS?

• With UN designating year 2014 as the *International Year of SIDS*, UNDESA throughout the year had played crucial role to come up with Samoa Pathway, which provides concrete guidelines for future development in SIDS.

• In this connection, UNPOG as a subsidiary organ of UNDESA, has aligned its activities with UNDESA’s thematic focus on SIDS since 2014, particularly by analysing how e-government contributes to sustainable development in SIDS and working out several e-government capacity building activities.
Current E-Government Development Status in SIDS
(based on 2014 UN E-Government Survey)
UN E-Government Survey

- It is a UNDESA flagship publication issued every two years since 2003.
- It is the only survey that assesses the e-government development status of all 193 UN Member States.
- It is used as a benchmark tool to measure e-government development, build governments’ capacity, provide policy recommendations and share good practices around the world.
**UN E-Government Survey and EGDI**

**E-Government Development Index (EGDI)**

*It is a composite indicator measuring the willingness and capacity of Public Administration to use ICT to deliver public services*

\[
EGDI = \frac{1}{3} \times OSI + \frac{1}{3} \times TII + \frac{1}{3} \times HCI
\]

- **Online Service Index (OSI)**: Product of DESA
- **Telecommunication Infrastructure Index (TII)**: Product of ITU and WB
- **Human Capital Index (HCI)**: Product of UNESCO and UNDP

*The EGDI rates are relative; NOT absolute measurement*
E-Government Development Index of SIDS

Source: 2014 UN E-Government Survey

[Bar chart showing comparisons between AIMS, Caribbean, Pacific, and World with values 0.42, 0.44, 0.32, and 0.47 respectively]
Online Service Index of SIDS

Source: 2014 UN E-Government Survey
Telecomm. Infrastructure Index of SIDS

Source: 2014 UN E-Government Survey
Human Capital Index of SIDS

Source: 2014 UN E-Government Survey

AIMS: 0.62
Caribbean: 0.70
Pacific: 0.65
World: 0.66
• Though there has been some advancement up to now, the SIDS still rank low in the global e-government development index.

• Only 13 out of 38 SIDS rank in the global top 100.

• In the Pacific, only 2 out of 13 SIDS rank in the global top 100 (Fiji in 85th and Tonga in 98th).

• In comparison to 2012 Survey, the biggest improvers among SIDS are Fiji (from 105th to 85th), Kiribati (from 149th to 132nd), Bahrain (from 36th to 18th), and Mauritius (from 93rd to 76th)
UNPOG’s Activities for SIDS
Review of Past Activities

→ Seamless integration from research to capacity building

1. Research
   “E-Government for Sustainable Development in SIDS”
   March - July 2014
   Presentation

2. Special Session
   2014 UNPSA
   25 June 2014
   Seoul, ROK
   Feedback

3. Special Event
   UN General Assembly
   Second Committee
   New York, USA
   Nov. 2014
   Feedback

4. Capacity Development Workshop
   3rd UN Conference on SIDS
   Apia, Samoa
   1-4 Sept. 2014
   SIDS Training Workshop
   Seoul, ROK
   Feb. 2015

5. Ministerial Meeting
   Pacific ICT Ministerial Meeting
   Tonga
   June. 2015

Ministerial Meeting
UNPOG’s Research on E-Government Development in SIDS
Research Objectives

- To empirically examine effects of e-government on good governance and sustainable development in SIDS
- To identify key success factors which makes the differences in e-government development among SIDS
- To provide relevant policy recommendations on e-government development for sustainable development in SIDS

Sample
22 SIDS in the Pacific and AIMS regions with UN membership

* Bahrain is included as UN-OHRLLS indicates Bahrain as SIDS.

Research Methods

- Literature Review, Panel Interviews, Survey
- Statistical analysis and Comparative Analysis
Research Design (cont’d)

**E-Government Development**
- ICT Infrastructure (1)
- Ability to use E-Gov’t (1)
- E-Service (1)
- E-Participation (1)

**Economic & Social Development**

**Environment & Disaster Management**
- Economic Development (1)
- Social Development (4)
- Environment Management (1)
- Disaster Management (1)

**Good Governance**
- Government Transparency (1)
- Government Capability (2)

( ): Number of Factors
## Research Findings

### Effects of E-Government Development on Sustainable Development

<table>
<thead>
<tr>
<th>Variable</th>
<th>Economic Development</th>
<th>Social Development</th>
<th>Environment Management</th>
<th>Disaster Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GDP per capita (log)</td>
<td>Rule of law</td>
<td>Political Stability &amp; Absence of Violence/Terrorism</td>
<td>Under-five mortality</td>
</tr>
<tr>
<td>HCI</td>
<td>0.305*</td>
<td>0.442**</td>
<td>0.326</td>
<td>-16.98***</td>
</tr>
<tr>
<td>TII</td>
<td>2.971***</td>
<td>1.057***</td>
<td>0.304</td>
<td>-41.38***</td>
</tr>
<tr>
<td>OSI</td>
<td>0.390</td>
<td>1.036***</td>
<td>0.851**</td>
<td>-14.60**</td>
</tr>
<tr>
<td>EPI(log)</td>
<td>0.002*</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.025</td>
</tr>
<tr>
<td>V&amp;A×CEPI</td>
<td>0.312</td>
<td>0.673***</td>
<td>1.313***</td>
<td>3.143</td>
</tr>
<tr>
<td>N</td>
<td>115</td>
<td>115</td>
<td>110</td>
<td>115</td>
</tr>
</tbody>
</table>

* p<0.1, ** p<0.05, ***p<0.01

- Three components (HCI, TII, and OSI) of EGDI also significantly affect various indicators of sustainable development.
### Research Findings (cont’d)

#### Effects of E-Government development on Good governance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control of Corruption</th>
<th>Government Effectiveness</th>
<th>Regulatory Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCI</td>
<td>0.380***</td>
<td>0.196</td>
<td>-0.224</td>
</tr>
<tr>
<td>TII</td>
<td>1.304***</td>
<td>2.424***</td>
<td>1.574***</td>
</tr>
<tr>
<td>OSI</td>
<td>0.255</td>
<td>0.710*</td>
<td>1.716***</td>
</tr>
<tr>
<td>EPI(log)</td>
<td>0.000</td>
<td>0.002*</td>
<td>0.001</td>
</tr>
<tr>
<td>V&amp;A × CEPI</td>
<td>0.327</td>
<td>0.619*</td>
<td>0.827**</td>
</tr>
<tr>
<td>N</td>
<td>115</td>
<td>115</td>
<td>115</td>
</tr>
</tbody>
</table>

*p<0.1, **p<0.05, ***p<0.01

- TII is found to have significant impacts on all good governance indicators. 
- HCI has a positive influence on government transparency while OSI has positive effects on government effectiveness and regulatory quality.
**Effects of Good Governance on Sustainable Development**

<table>
<thead>
<tr>
<th>Variable</th>
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<tr>
<td></td>
<td>GDP per capita (log)</td>
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<td>Political Stability &amp; Absence of Violence/Terrorism</td>
<td>Under-five Mortality</td>
</tr>
<tr>
<td>Government Capability</td>
<td>0.245***</td>
<td>0.676***</td>
<td>0.178***</td>
<td>-3.72*</td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>0.127**</td>
<td>0.130**</td>
<td>0.455***</td>
<td>-5.62***</td>
</tr>
<tr>
<td>N</td>
<td>123</td>
<td>123</td>
<td>118</td>
<td>123</td>
</tr>
</tbody>
</table>

* p<0.1, ** p<0.05, ***p<0.01

- Government capability is shown to affect all sustainable development indicators.
- Government transparency also shows significant causal relationships with economic and social development. However, it is not found to have any significant effect on the level of environment and disaster management.
### E-Government Success Factors

<table>
<thead>
<tr>
<th>Criteria</th>
<th>High performers</th>
<th>Middle and low performers</th>
<th>Gap (times)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existence of national e-gov’t strategy (1)</strong></td>
<td>0.7</td>
<td>0.21</td>
<td><strong>3.3</strong></td>
</tr>
<tr>
<td>Existence of a coordinating organization for e-government (1)</td>
<td>0.6</td>
<td>0.25</td>
<td><strong>2.4</strong></td>
</tr>
<tr>
<td><strong>Political commitment (1)</strong></td>
<td>0.9</td>
<td>0.5</td>
<td><strong>1.8</strong></td>
</tr>
<tr>
<td><strong>Legal framework (1)</strong></td>
<td>0.5</td>
<td>0.17</td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td><strong>Financial feasibility (1)</strong></td>
<td>0.5</td>
<td>0.17</td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td>Linkage b/w e-gov’t &amp; gov’t reform (1)</td>
<td>0.5</td>
<td>0.33</td>
<td><strong>1.5</strong></td>
</tr>
<tr>
<td><strong>E-awareness policy (1)</strong></td>
<td>0.35</td>
<td>0.13</td>
<td><strong>2.6</strong></td>
</tr>
<tr>
<td><strong>Sum (7)</strong></td>
<td>4.05</td>
<td>2.25</td>
<td><strong>1.8</strong></td>
</tr>
</tbody>
</table>

Source: Dr. Yongbeom Lee’s research on “E-gov for Sustainable Development in SIDS”, 2014

- Higher performers show higher scores across all the 7 key success factors of e-government development than those of middle/low performers.
- Bigger gaps between high and low performers lie in the existence of national e-government strategy, legal framework, and financial feasibility.
Policy Recommendations
Policy Recommendations

1. SIDS pursues e-government development in line with national development priorities
   - E-government development has positive effects on better governance and sustainable development of SIDS.
   - Advancement on e-government is not only a trait of developed countries but also serves as an enabler for sustainable development of developing countries.

2. SIDS focuses their efforts on the establishment of ICT/e-government infrastructures first.
   - ICT infrastructures have significantly positive effects on good governance and sustainable development of SIDS.
   - However, the current status of ICT infrastructure development in Pacific & AIMS SIDS is much behind of the average of the world.
Policy Recommendations (cont’d)

3. SIDS develop an integrated and comprehensive e-government development strategy, incorporating the 7 key success factors.

- The 7 key success factors make the differences in e-government development among SIDS.
- High performers in terms of good governance and sustainable development show higher scores on all the 7 key success factors of e-government development.
4. SIDS strengthens international partnership and cooperation

- The differences between high and low performing SIDS are noticeably observed, especially, in terms of the status of national e-government strategy, legal framework, and financial feasibility.
- Main reasons include lack of experts and experiences in establishing a comprehensive strategy, and lack of financial resources, which may not be in control of SIDS themselves.
- The expansion of existing partnership and the launch of new partnership with various international organizations, regional development banks, and individual developed countries to mobilise financial and human resources for e-government development.
- The establishment of SIDS development platform for e-government to promote exchange of knowledge and experiences, share best practices, and also better coordinate allocation of resources.
Way Forward
Way Forward

2014 – Now
Research and several capacity building programmes

Nov 2015 (TBC)
Workshop for e-government development, to be held in one of Pacific Islands, in order to identify the most urgently needed application in Pacific Islands

From 2016 onward
To develop customised applications for Pacific Islands in close cooperation with leading countries in e-government
THANK YOU!

UNITED NATIONS PROJECT OFFICE ON GOVERNANCE