



UN Public Administration Programme

Division for Public Administration and Development Management (DPADM)  
UN Department of Economic and Social Affairs (UNDESA)



# E-Government for Sustainable Development in PSIDS

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

Mr. Jae-hong Lim  
Head of UNPOG





# AGENDA

1. Introduction of UNPOG
2. UNPOG and SIDS
  - A. Why UNPOG for SIDS?
  - B. UNPOG's Past Projects for SIDS
  - C. Research on E-Government Development in SIDS
3. Current Status of E-Government Development in PSIDS  
(based on 2010-2014 UN E-Government Survey)  
✧ Best Practices
4. Way Forward



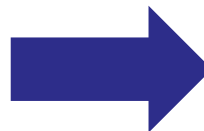
# 1. Introduction of UNPOG

# Establishment



**May 2005**

Seoul Declaration -  
6th Global Forum on Reinventing Government



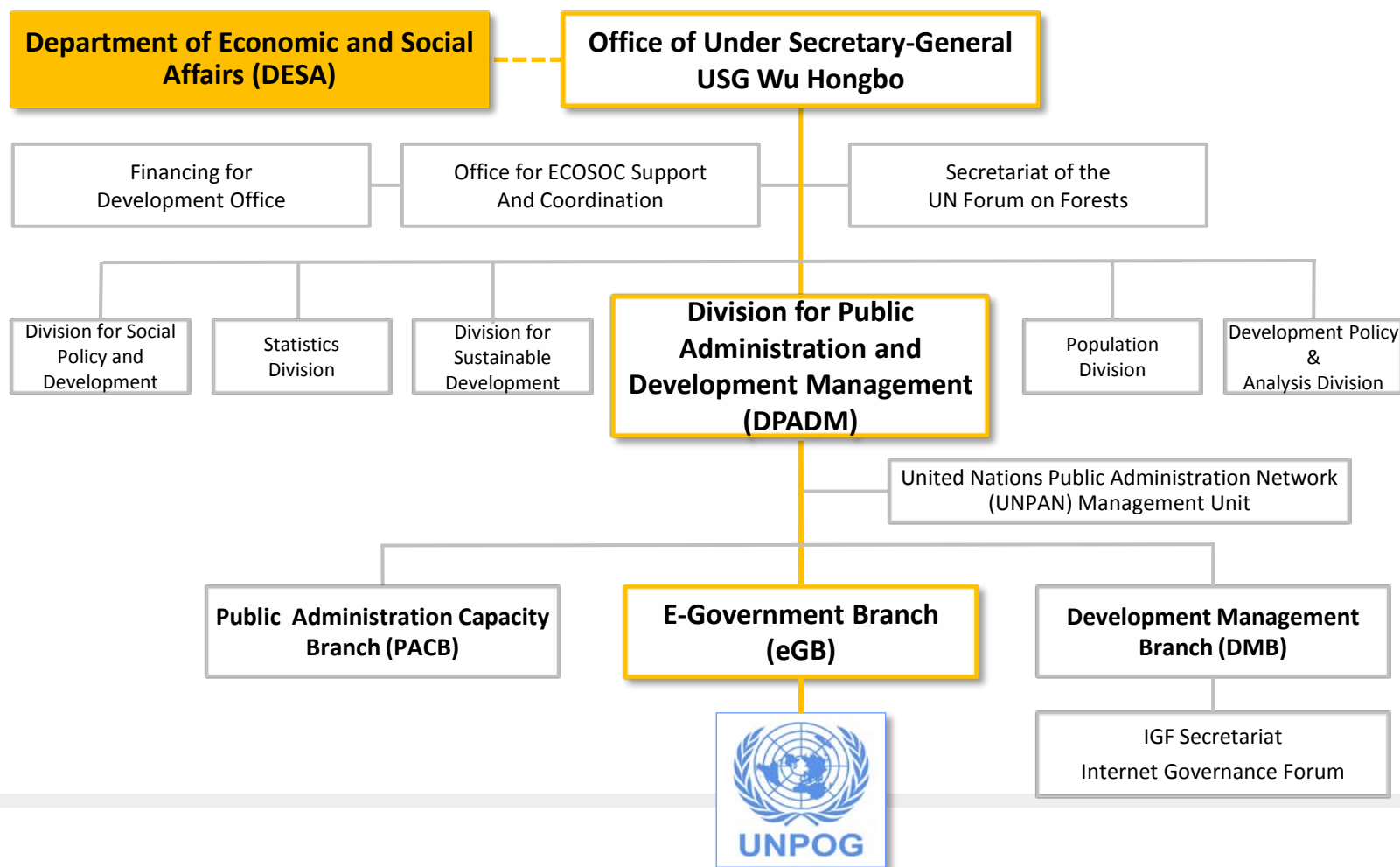
**UNITED NATIONS PROJECT  
OFFICE ON GOVERNANCE**

**June 2006**

Technical Cooperation and Trust Fund Agreement  
with Ministry of the Interior (MOI) of ROK

Officially launched in  
September 2006

# Organisational Chart



# 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**



## **2. UNPOG and SIDS**

### **A. Why UNPOG for SIDS**

## Why UNPOG for SIDS?

- With UN designating year 2014 as the ***International Year of SIDS***, UNDESA throughout the year had played crucial role to bring forth SAMOA Pathway, which provides concrete guidelines for future development in SIDS.
- In this connection, UNPOG as a project office 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.



International Year of Small Island Developing States  
2014





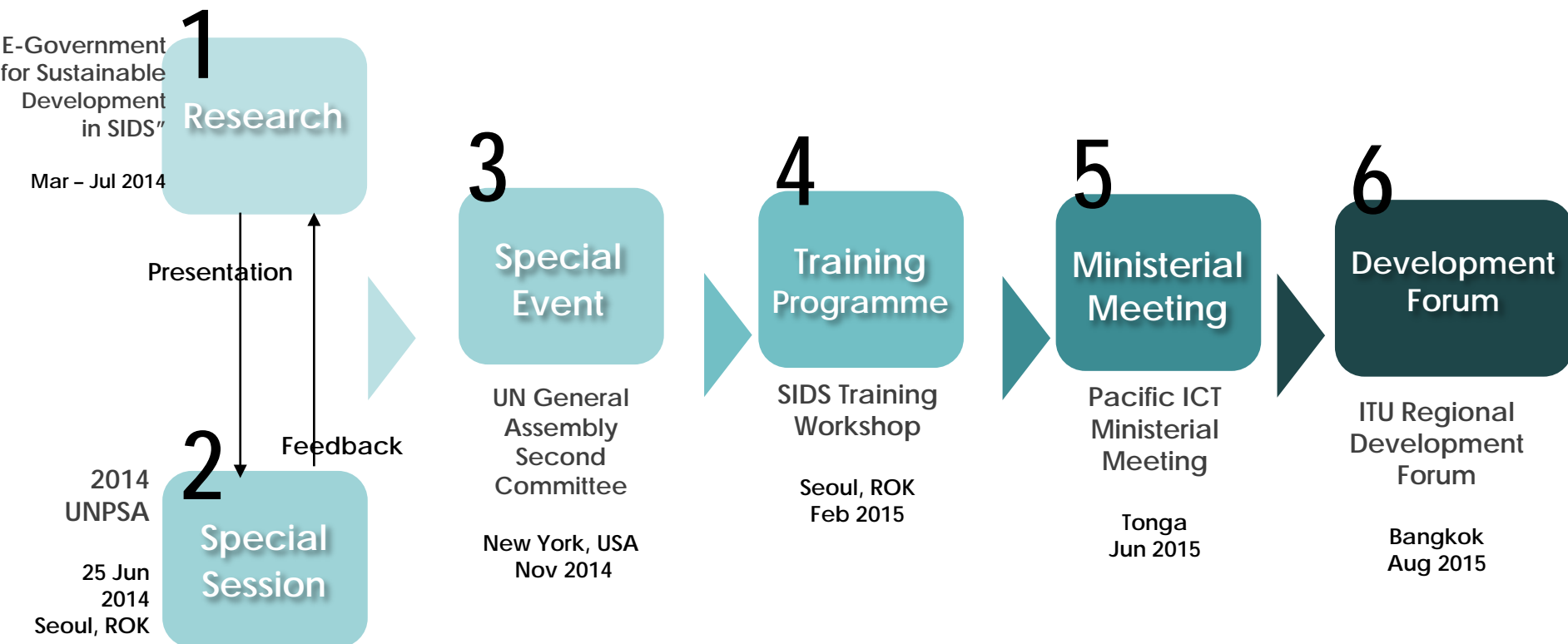


## **2. UNPOG and SIDS**

### **B. UNPOG's Past Projects for SIDS**

# Review of UNPOG's Past Projects for SIDS

→ *Seamless integration* from research to capacity building



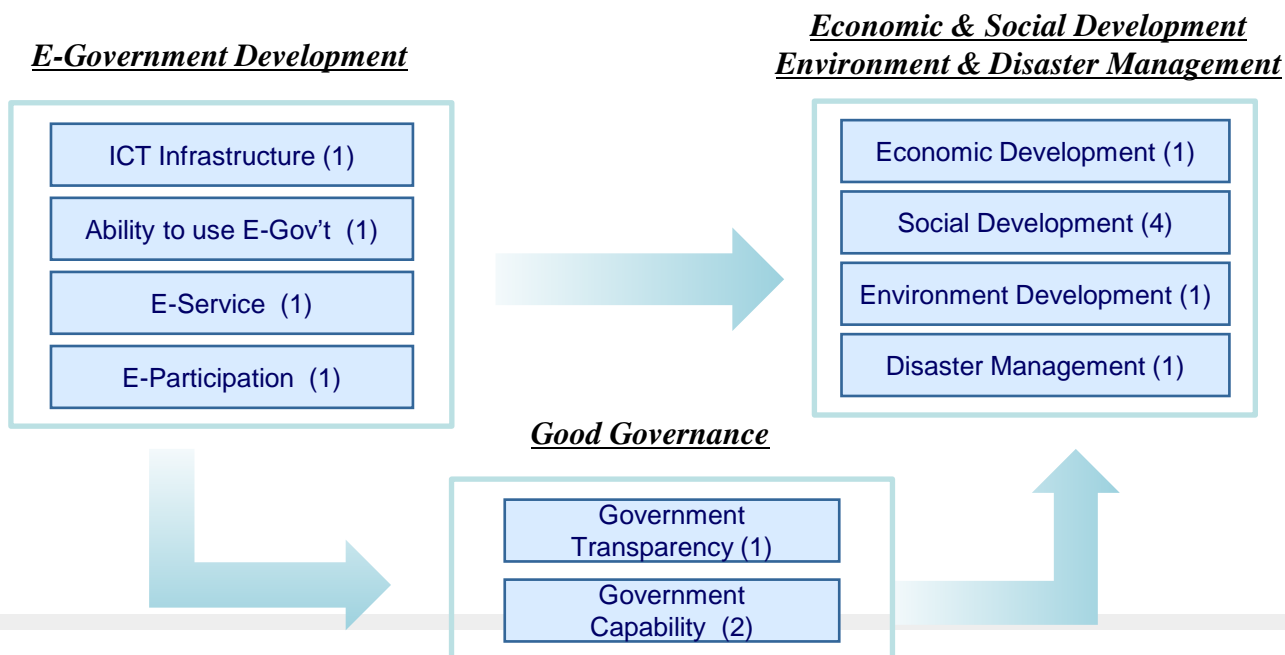


## **2. UNPOG and SIDS**

### **C. UNPOG's Research on E-Government Development in SIDS**

# Research Objective and Design

1. Empirically examine effects of e-government on good governance and sustainable development in SIDS
2. Identify key success factors in e-government development of SIDS, and provide policy suggestions accordingly



- Research conducted for 22 SIDS in the Pacific and AIMS through research review, panel interview, survey, and statistical analysis

( ): Number of Factors

# Research Findings (1) – Regression Analysis

1. Three components of E-Government Development Index (EGDI), respectively Online Service Index (OSI), Telecommunication Infrastructure Index (TII), and Human Capital Index (HCI), significantly affect sustainable development.

## 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

$$EGDI = ( 1/3 * OSI + 1/3 TII + 1/3 HCI )$$

Online Service Index OSI

Data Source: DESA

Telecommunication  
Infrastructure Index TII

Data Source: ITU

Human Capital Index HCI

Data Source: UNESCO

EGDI

**RANKING OF  
UN MEMBER  
STATES**

\*The EGDI levels are relative;  
NOT absolute measurement

## Research Findings (1) – Regression Analysis

2. In particular, telecommunication infrastructure index is found to have significant impacts on all good governance indicators. Human capital index has a positive influence on government transparency while online service index has positive effects on government effectiveness and regulatory quality.
3. Government capability is shown to affect all sustainable development indicators.
4. Government transparency also shows significant impact on economic and social development. However, it is not found to have any significant effect on the level of environment and disaster management.

## Research Findings (2) – Comparative Analysis

7 key success factors were identified through literature reviews and scores were given to each country after interview and survey.

Criteria			Way of scoring		
C1. Existence of e-government strategy			Yes, separately (2)	Included in other plan (1)	No (0)
C2. Existence of a coordinating organization for e-g overnment			Yes (1)		No (0)
C3. Political commitment			Significant (1)	To some extent (0.5)	Insignificant (0)
C4. Legal framework					
C5. Financial feasibility					
C6. Linkage b/w e-government and government reform					
C7. Existence of e-awareness programme	Public employees	Promotion	Yes (0.25)	Partially exists (0.125)	No (0)
		Training			
	Citizens	Promotion			
		Training			
	Private sector	Promotion			
		Training			
Students	Promotion				
	Training				

## Research Findings (2) – Comparative Analysis

Countries are grouped into three, respectively group A, B, and C, based on EGDI.

Group	Country	EGDI (2014)
Group A	Mauritius	0.5338
	Seychelles	0.5113
	Fiji	0.5044
	Maldives	0.4813
	Tonga	0.4706
	Palau	0.4415
	Samoa	0.4204
Group B	Cape Verde	0.3551
	Micronesia	0.3337
	Kiribati	0.3201
	Tuvalu	0.3059
	Marshall Islands	0.2851
Group C	Nauru	0.2776
	Vanuatu	0.2571
	Timor-Leste	0.2528
	S. Tomé & Príncipe	0.2218
	Solomon Islands	0.2087
	Comoros	0.1808
	Guinea-Bissau	0.1609
	Papua New Guinea	0.1203



## Research Findings (2) – Comparative Analysis

Criteria	Group A (High)	Group B & C (Middle/Low)	Gap (times)
<b>Existence of national e-gov't strategy (1)</b>	0.7	0.21	<u>3.3</u>
Existence of a coordinating organization for e-government (1)	0.6	0.25	2.4
Political commitment (1)	0.9	0.5	1.8
<b>Legal framework (1)</b>	0.5	0.17	<u>3.0</u>
<b>Financial feasibility (1)</b>	0.5	0.17	<u>3.0</u>
Linkage b/w e-gov't & gov't reform (1)	0.5	0.33	1.5
E-awareness policy (1)	0.35	0.13	2.6
Sum (7)	4.05	2.25	1.8

1. Group A (high performer) shows higher scores across all the 7 key success factors of e-government development than those of Group B & C (middle/low performers).
2. Bigger gaps between high and middle/low performers are found in the existence of national e-government strategy, legal framework, and financial feasibility.

# Research Recommendations

## **1. SIDS should pursue 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.

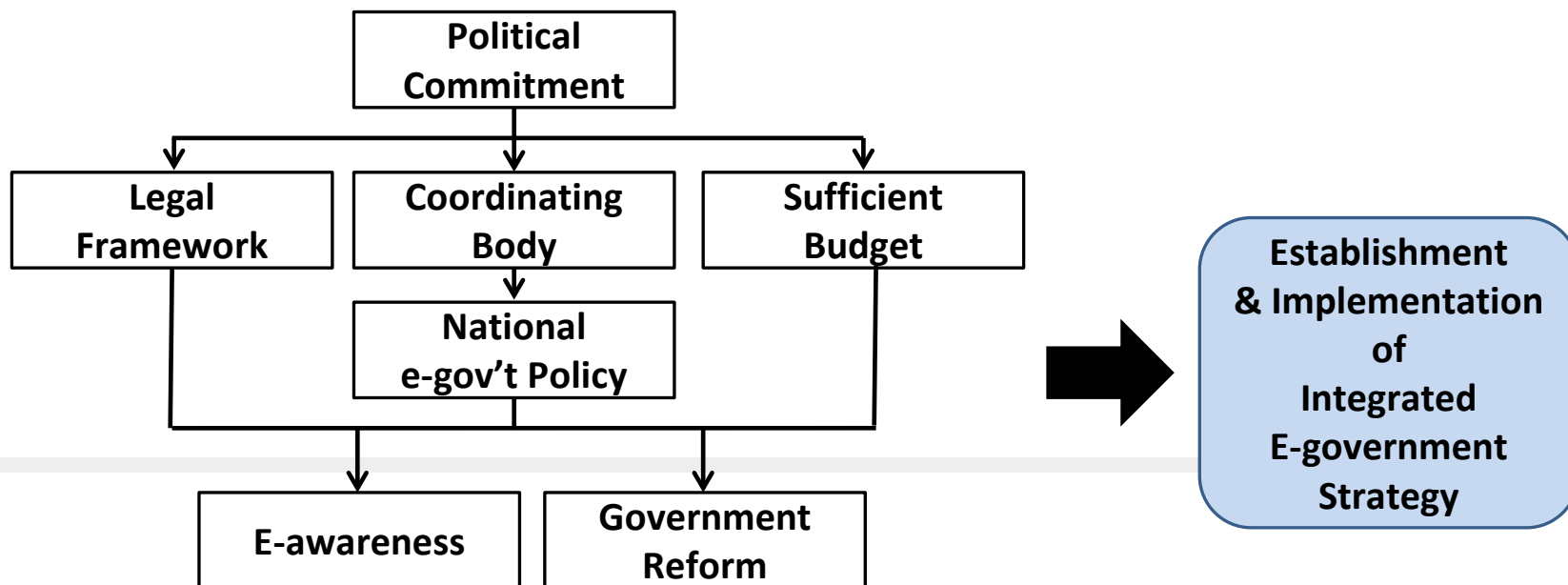
## **2. SIDS should focus their efforts on the establishment of ICT/e-government infrastructures first.**

- 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.

## Research Recommendations (cont'd)

### 3. SIDS should 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.



## Research Recommendations (cont'd)

### **4. SIDS should strengthen 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 mobilize 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.



### **3. Current Status of E-Government Development in PSIDS**

**(based on 2010-2014 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

$$\text{EGDI} = (1/3 * \text{OSI} + 1/3 \text{TII} + 1/3 \text{HCI})$$

Online Service Index OSI

Data Source: UNDESA

Telecommunication  
Infrastructure Index TII

Data Source: ITU

Human Capital Index HCI

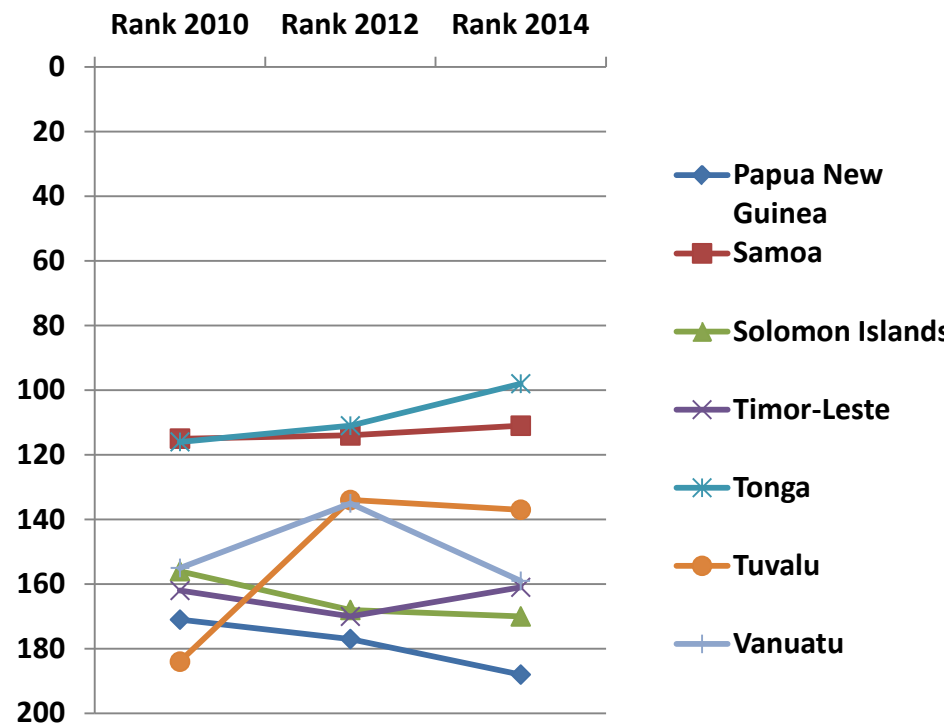
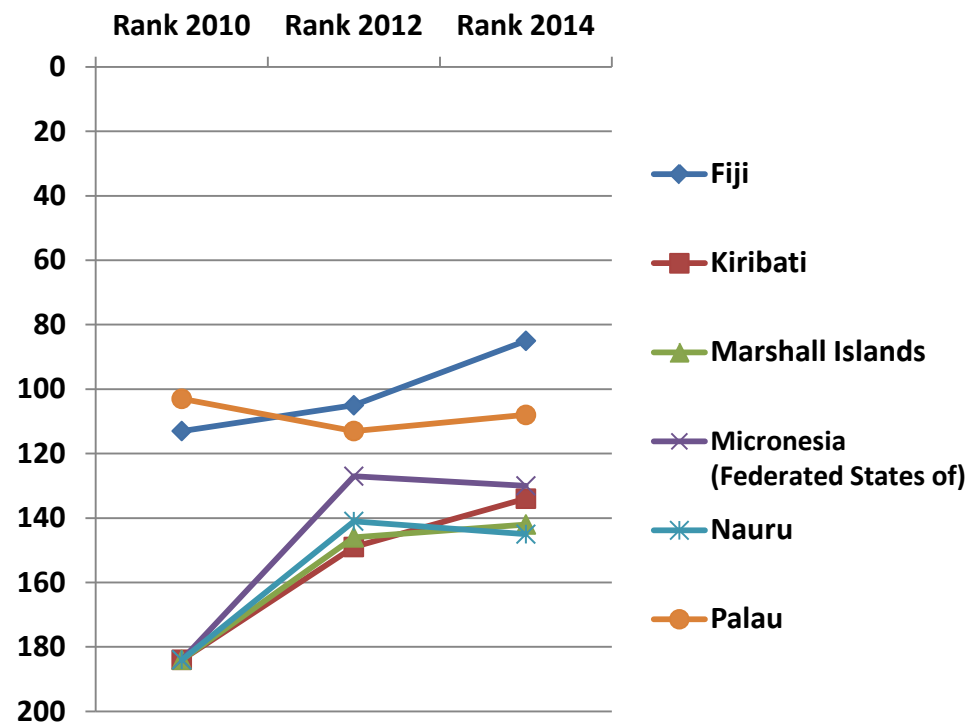
Data Source: UNESCO

EGDI

**RANKING OF  
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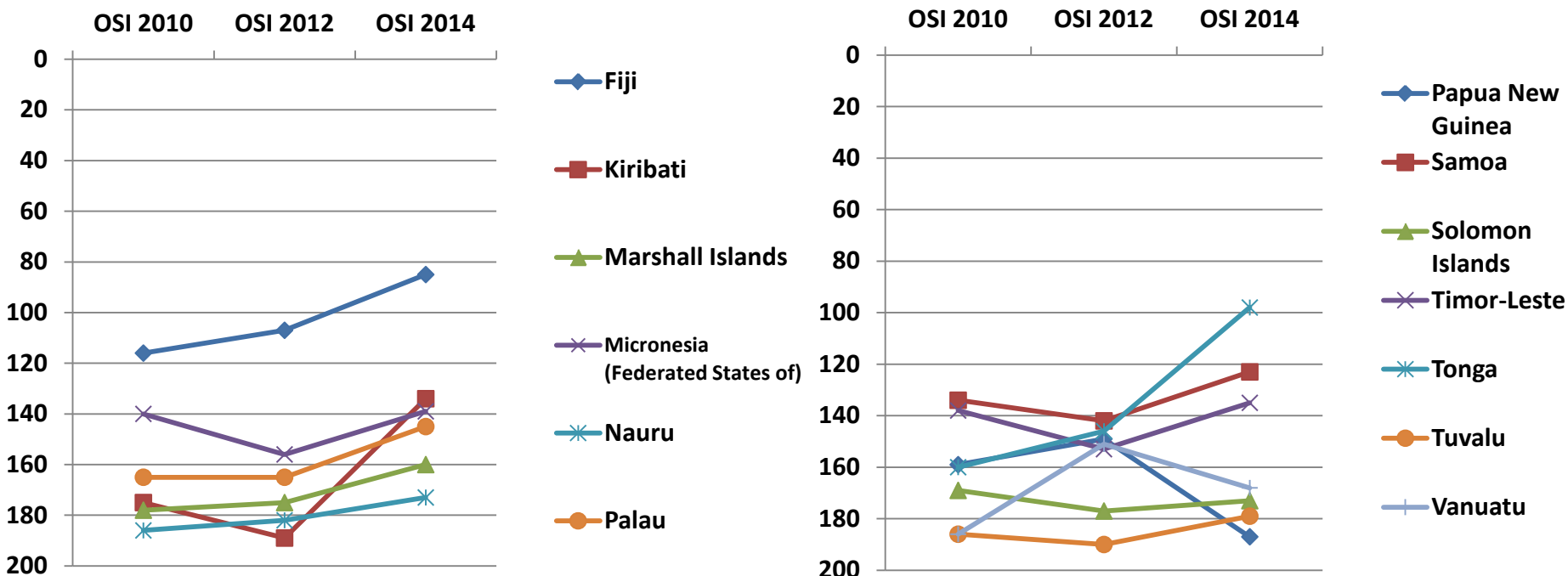
# Change in EGDI Ranking of PSIDS (YR 2010- YR 2014)



Fiji, Palau, Tonga, and Samoa have been ranked higher than other PSIDS since 2010.

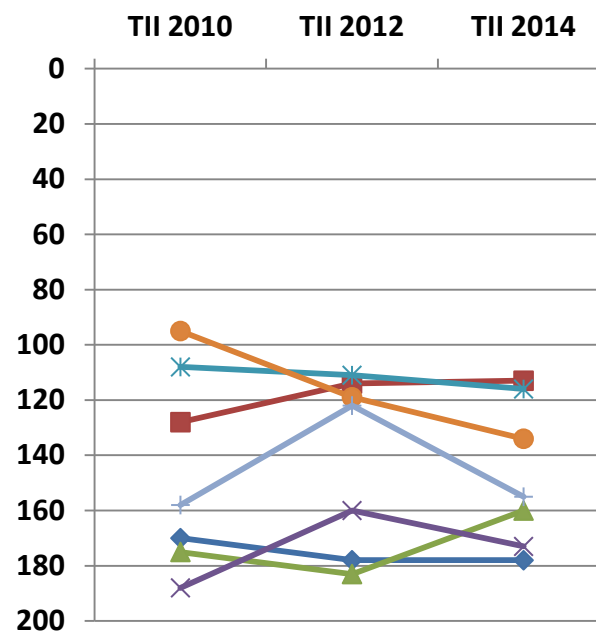
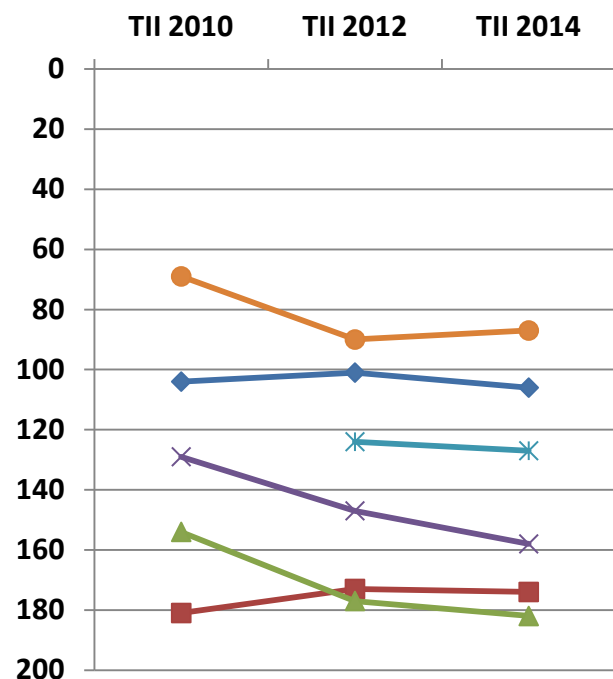


# Change in OSI Ranking of PSIDS (YR 2010- YR 2014)



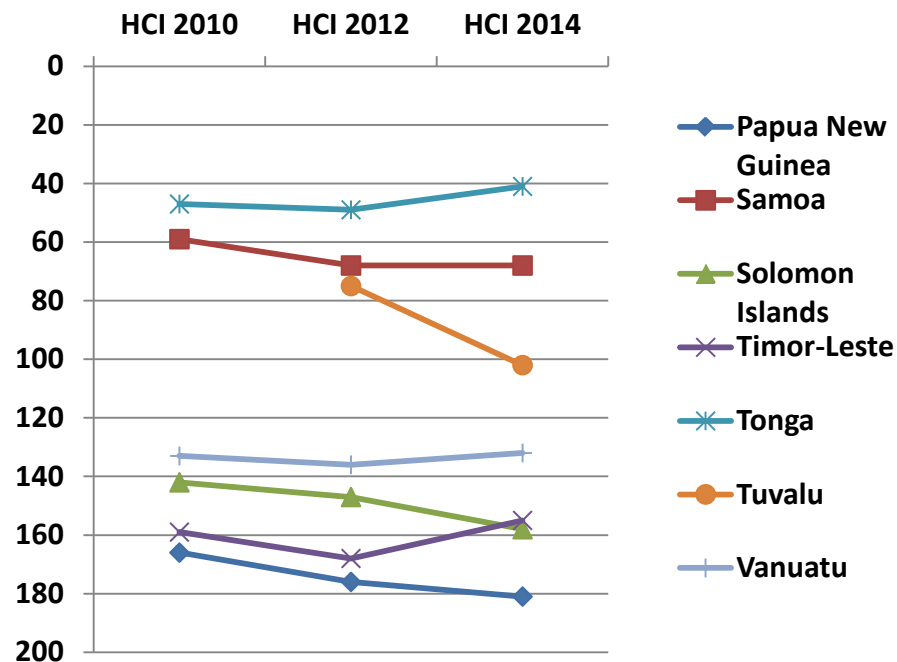
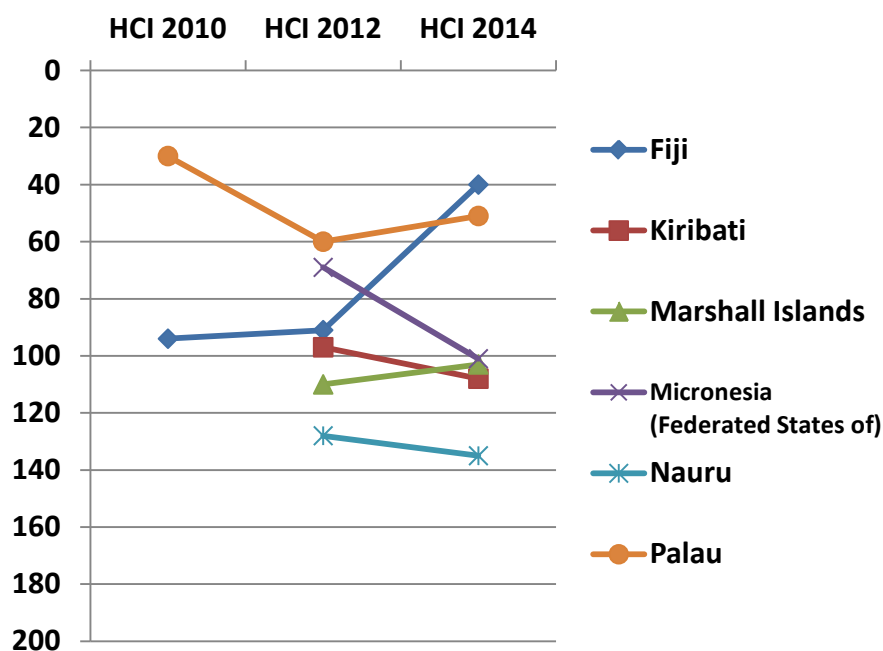
There has been generally found improvement in the ranking of OSI from 2012 to 2014. In particular, Fiji has shown exceptional performance across years in the ranking of OSI.

# Change in TII Ranking of PSIDS (YR 2010- YR 2014)



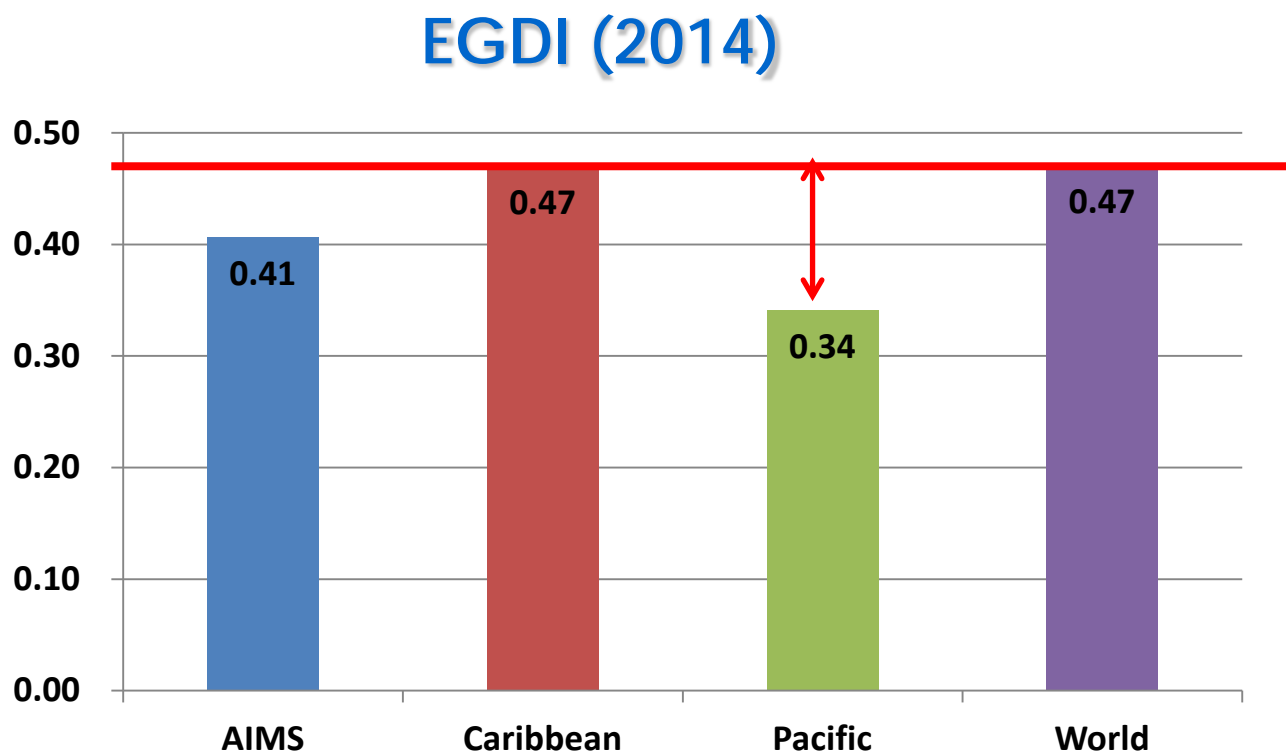
In terms of the ranking of TII, Palau has been showing the best performance among PSIDS since 2010.

# Change in HCI Ranking of PSIDS (YR 2010- YR 2014)



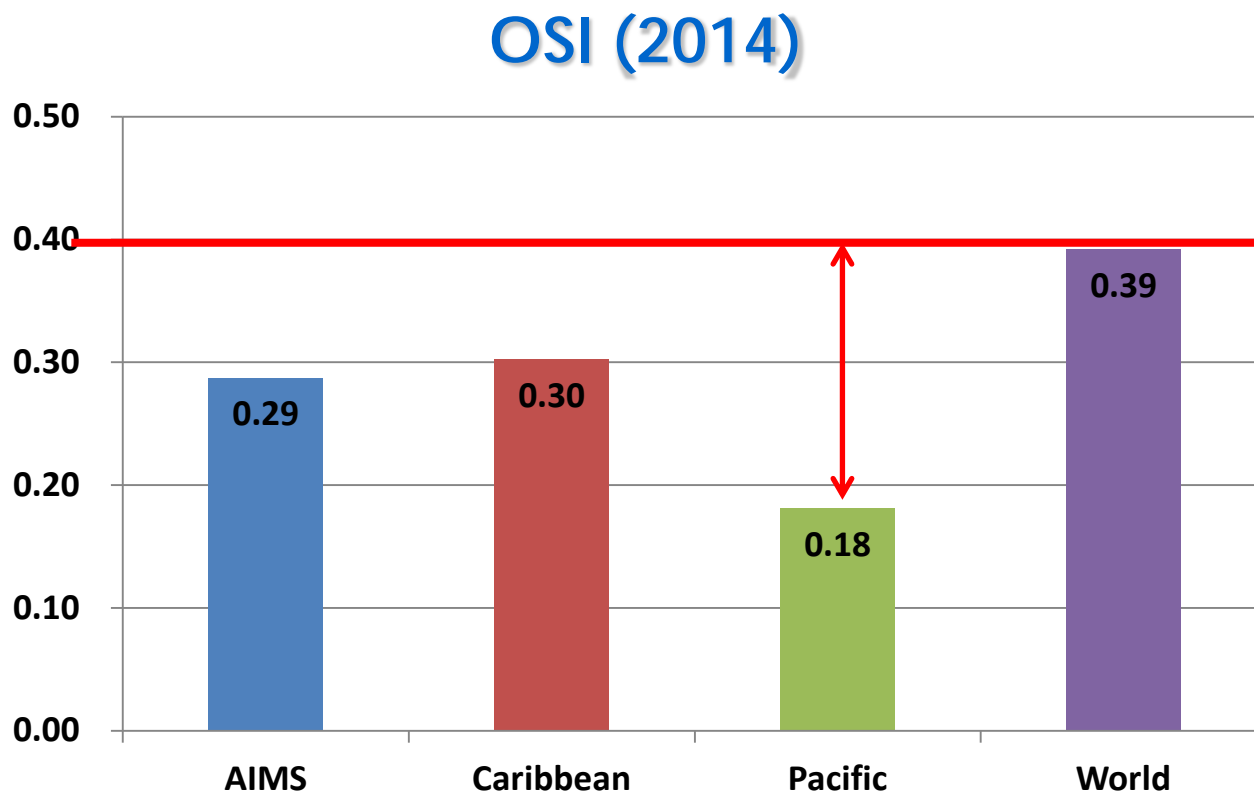
In HCI, Fiji, Palau, Tonga, and Samoa have been placed in higher ranks than others since 2010. In case of Fiji, there was significant increase from 92<sup>nd</sup> to 40<sup>th</sup> between 2012 and 2014.

## Comparison between PSIDS and Others in the 2014 Survey



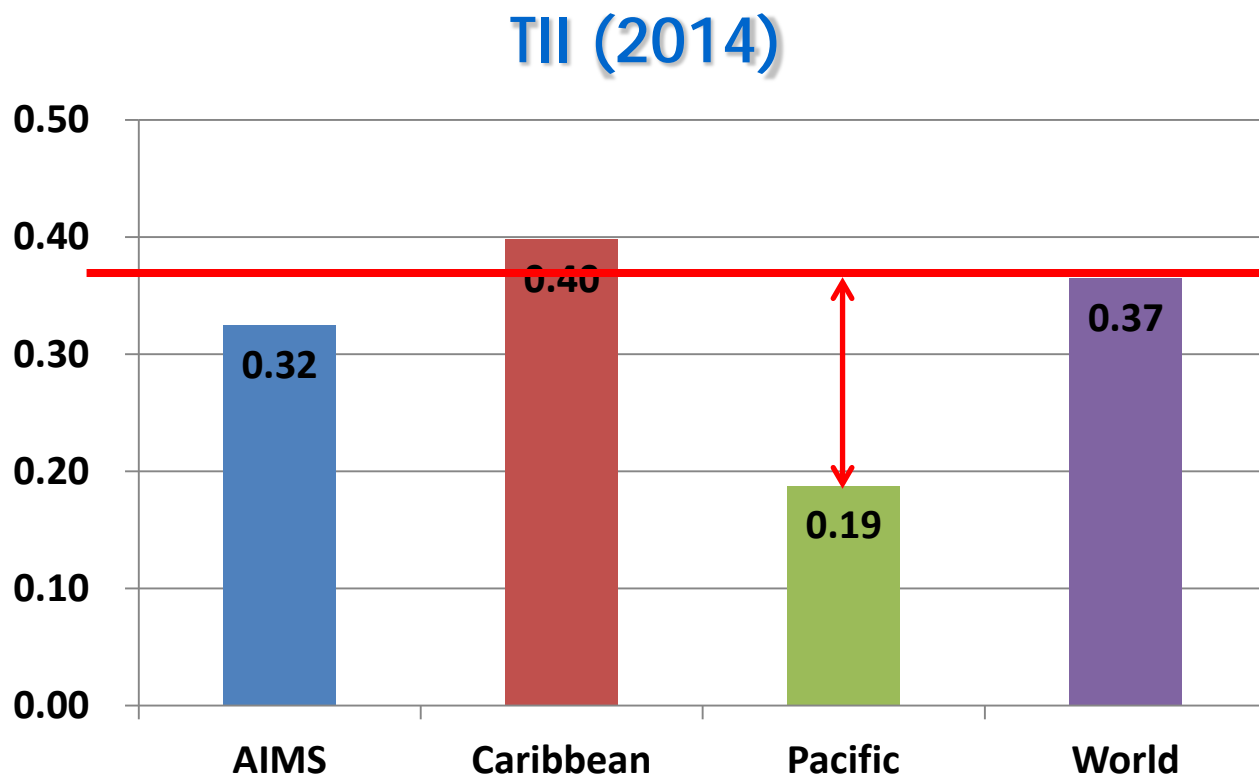
EGDI of PSIDS are placed lower than world average.

## Comparison between PSIDS and Others in the 2014 Survey



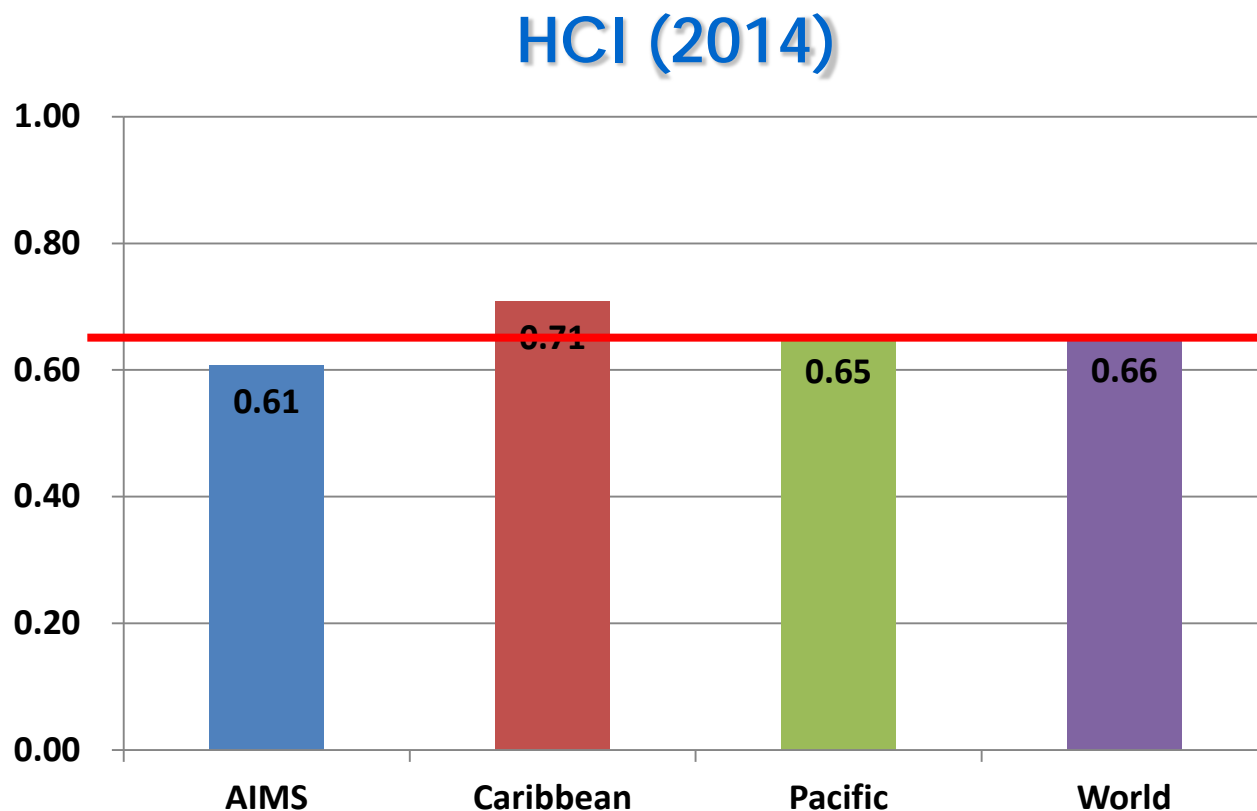
In terms of OSI, there is considerable gap between PSIDS and world.

## Comparison between PSIDS and Others in the 2014 Survey



In terms of TII, considerable gap is also found between PSIDS and world.

## Comparison between PSIDS and Others in the 2014 Survey



HCI of PSIDS is similar with that of world and other SIDS.

## E-Government Development Status in SIDS

- 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 2014 UN E-Government Survey.
- Among PSIDS, only 2 out of 13 are ranked in the global top 100 (Fiji in 85<sup>th</sup> and Tonga in 98<sup>th</sup>).
- In comparison to 2012 Survey, the biggest improvers among PSIDS are Fiji (from 105<sup>th</sup> to 85<sup>th</sup>) and Kiribati (from 149<sup>th</sup> to 132<sup>nd</sup>).





# Best Practices of SIDS

(based on 2014 UN E-Government Survey)

## Trinidad and Tobago: m-Fisheries

- The Fishery sector is vital to the economy of SIDS such as Trinidad and Tobago, both in providing employment and in enhancing the local food supply.
- However, barriers to fishing industry development include lack of training in natural resources management and in sea safety.
- Due to high mobile phone penetration in Trinidad and Tobago (86 per cent among the poor), the use of mobiles is identified as a highly effective tool to address these problems.
- Through the m-Fisheries mobile app users can see 'Got Fish' posts by local fishermen, make a request via the 'Need Fish', get quick access to wholesale market prices, access compass and GPS enabled location, improve their safety through the 'Info Zone' with sea safety information and a SOS button for emergencies that automatically alerts the coast guard about one's position when help is needed.

# Haiti: Response and Recovery with Sahana System

- The Sahana Disaster Management System, which provides modular, web-based disaster management applications, has been used on the occasions of several natural disasters around the world, including Haiti earthquake in 2010.
- In particular, the Sahana portal in Haiti provided and shared necessary information for the relief operations through various functions such as:
  - ✓ Organisation registry to track the agencies' relief efforts and avoid duplication
  - ✓ SMS service through which citizens could request assistance and information
  - ✓ Hospital management, food request, victim identification registry, shelter registry, translations service, situation mapping and so on



# Way Forward

# Way Forward

**2014 – Now**

Research and several  
capacity building  
programmes

**Nov 2015**

Workshop for e-government  
development, in Fiji, in order  
to identify the most urgently  
needed application in  
Pacific Islands

**By June 2016**

To review and summarize  
phase I of SIDS assisting  
project, and prepare phase  
II

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# THANK YOU!

UNITED NATIONS PROJECT  
OFFICE ON GOVERNANCE