



**United
Nations**

Department of
Economic and
Social Affairs

Session 7

Government Innovation and Disaster Risk Reduction: Frontier Technologies for Resilience

June 2019

Mr. Chae Gun Chung

Head,
Project Office on Governance,
Division for Public Institutions
and Digital Government
(DPIDG),
UN DESA





Presentation Outline

- Disasters and the SDGs
- E-Government Concept for SDGs
- E-Government 2018 Survey Results
- Public Governance and Frontier Technologies
- Fourth Industrial Revolution and DRR
- UNPOG Focus



Resilience is central to achieving the 2030 Agenda

- Increasing frequency and intensity of disasters due to climate change
- One step forward and two steps back unless we invest in resilience
- 2018 HLPF Theme: Transformation towards sustainable and resilient societies



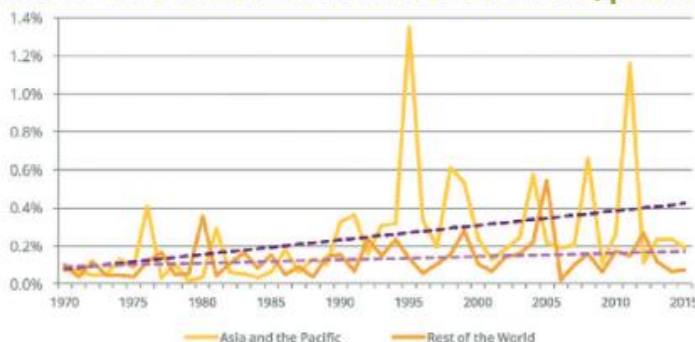
**HIGH-LEVEL POLITICAL FORUM
ON SUSTAINABLE DEVELOPMENT**



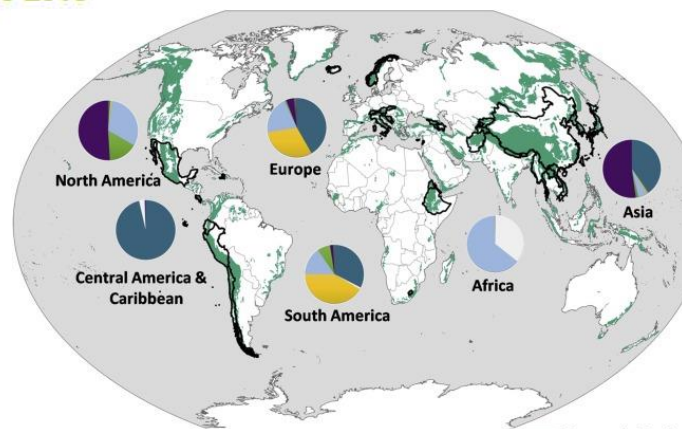
Disasters Setback SDG Gains

Disasters are obstacles to governments achieving the Sustainable Development Goals by 2030

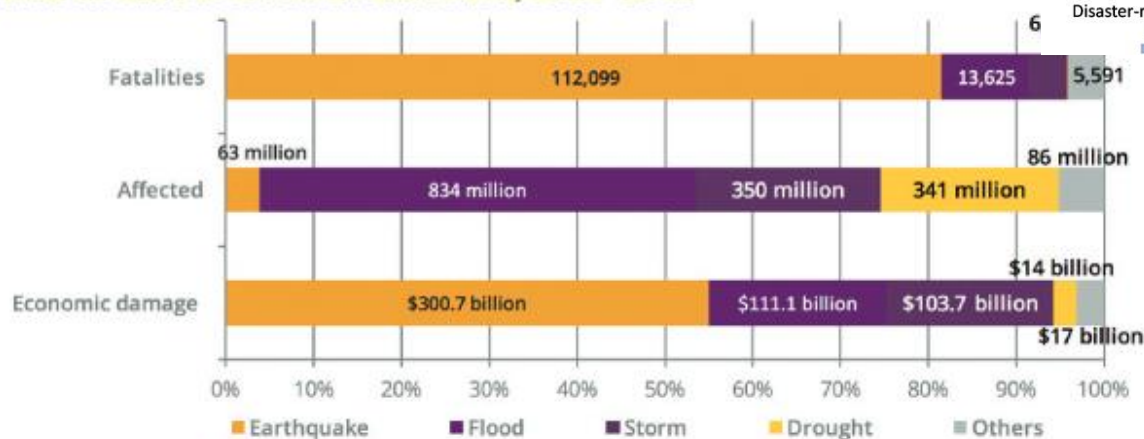
Estimated damage, Asia and the Pacific and the rest of the world, percentage of GDP, 1970-2016



Source: Based on damage data from EM-DAT. (Accessed on 4 July 2017) GDP data from ESCAP online statistical database.



Disaster impacts in East and North-East Asia, 2000-2016



Source: Based on damage data from EM-DAT.

Disaster-related deaths from:
■ Drought ■ Earthquake ■ Epidemic ■ Extreme temperature
■ Flood ■ Landslide ■ Storm ■ Volcanic activity ■ Wildfire



The UN E-Government Survey Findings on Resilience



The E-Gov Survey presents a systematic assessment of the use of ICT to transform and reform the public sector by enhancing efficiency, effectiveness, transparency, accountability, access to public services and citizen participation in 193 Countries

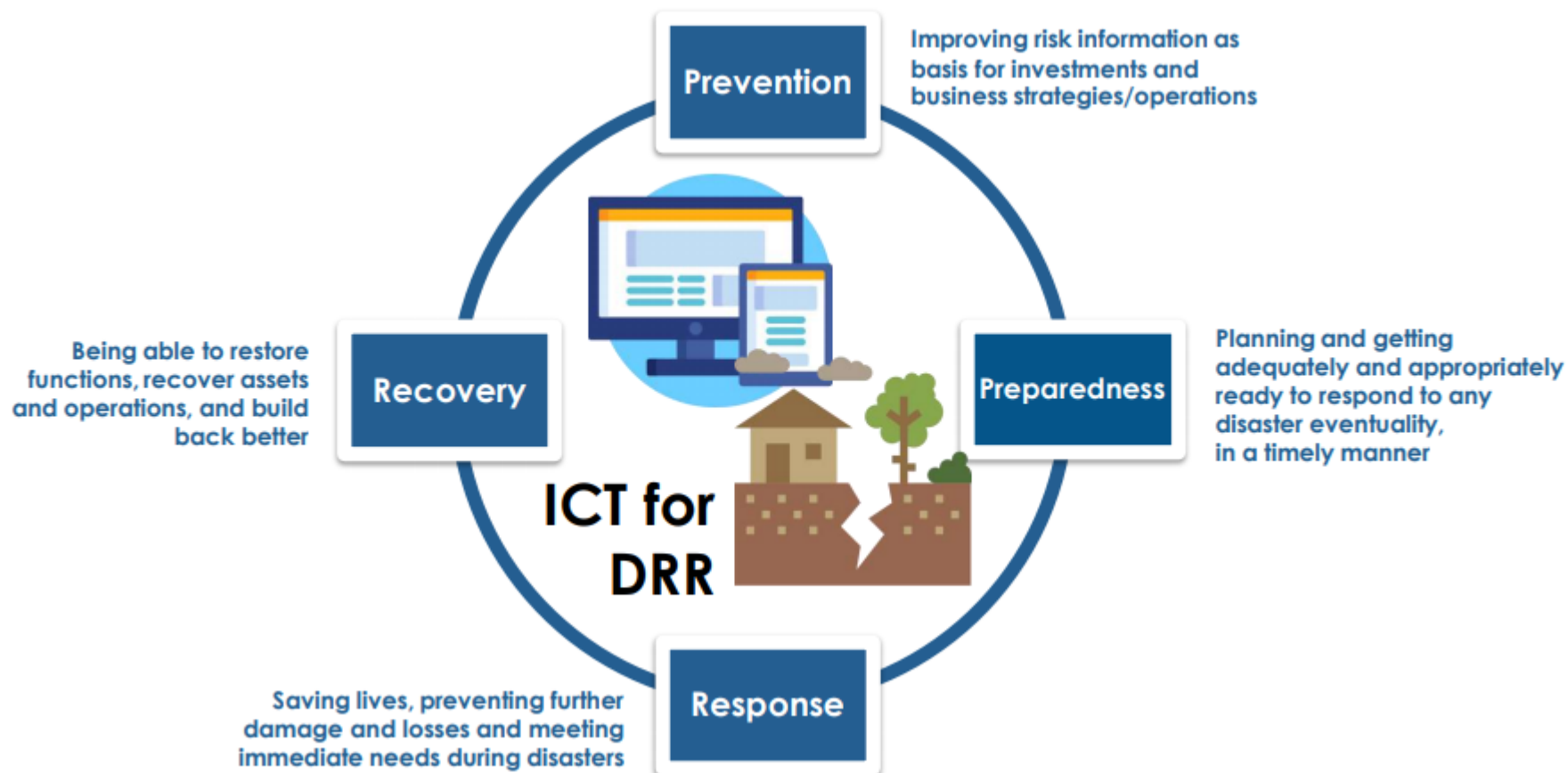
*The experience of the
UN E-GOV Survey*

2018 Theme:
Transformation toward
Sustainable and Resilient
Societies



The UN E-Government Survey Findings on Resilience

- **E-Resilience:** The use of ICT during all phases of disaster risk management —*prevention, reduction, preparedness, response and recovery* – to **reduce impact and maintain gains**



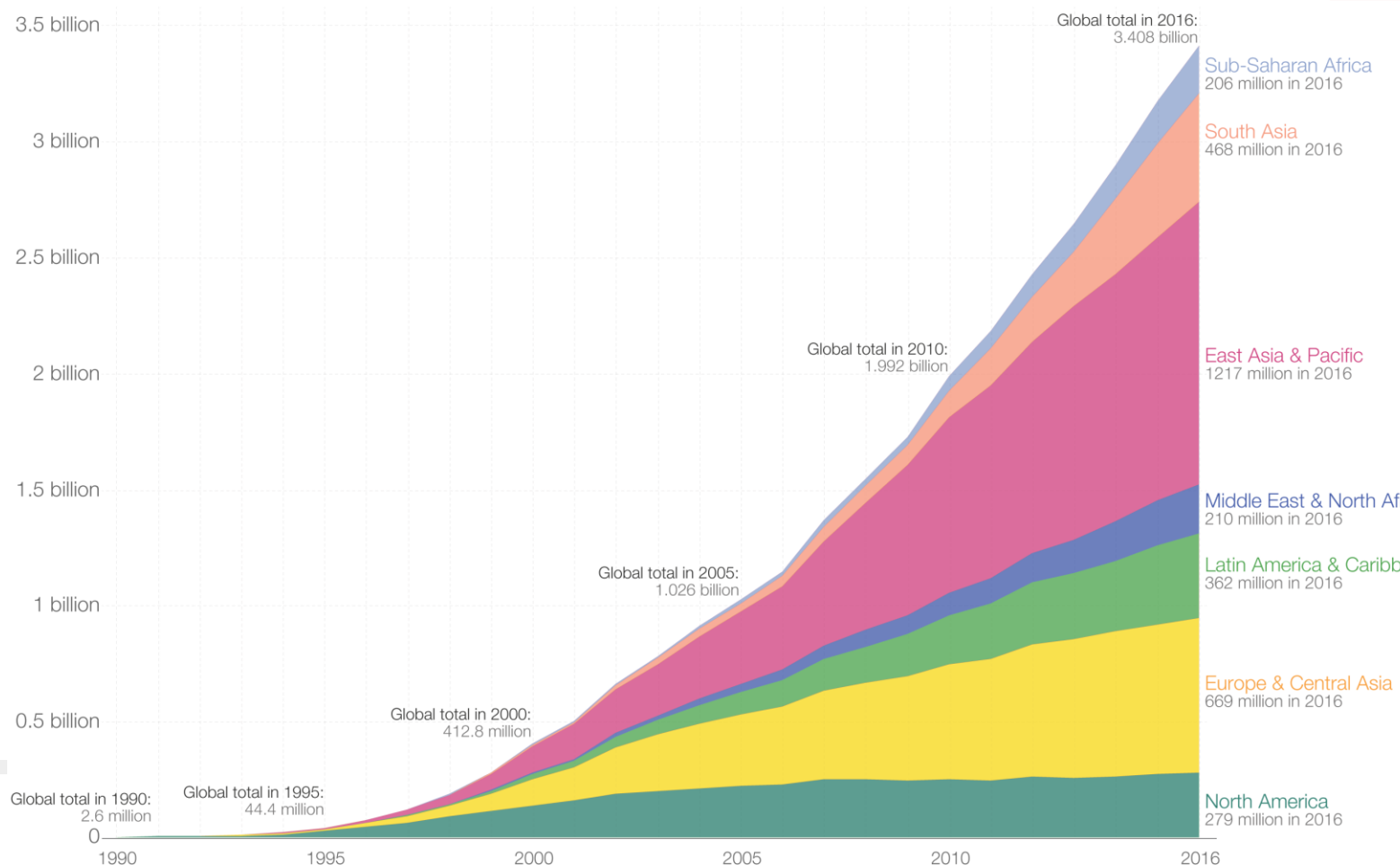


The UN E-Government Survey Findings on Resilience

When
broadband
connectivity is
increased
disaster impact is
reduced

Governments
providing
relevant
weather- and
disaster-related
information on
their online
government sites
had lower
casualties

Internet users by world region since 1990





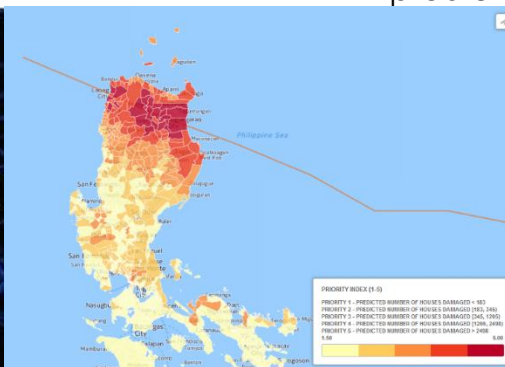
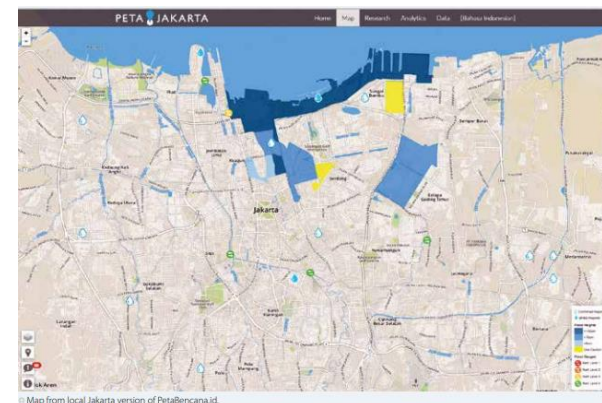
Public Governance and Frontier Technologies

Digital government and ICTs today more than ever, offer an unprecedented opportunity to achieve the SDGs

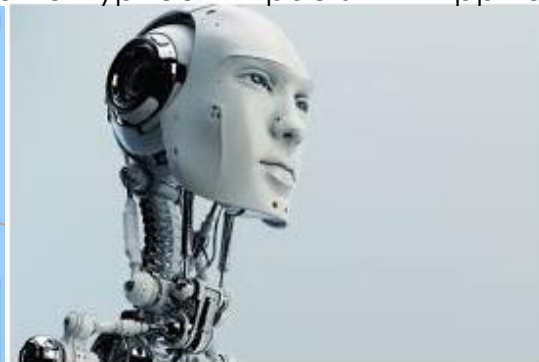
Frontier technologies for

- Better data
- Effective decision-making
- Risk-informed planning

PetaBencana.id 



AI prediction of Typhoon Impacts in Philippines





Fourth Industrial Revolution and DRR



**Open
Government Data**



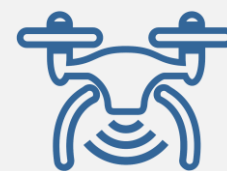
**Artificial
Intelligence**



**Geographic
Information
System**



Blockchain



**Unmanned
Aerial Vehicle**



UN Project Office on Governance, DPIDG, DESA



Capacity Needs Assessment Results

22 countries surveyed:

1. Innovation in Government Services
2. Disaster Risk Reduction

Mission: Assist Member States to improve their public governance capacity to achieve the SDGs



Capacity Development



Research & Policy Analysis



Communications & Outreach



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



**United
Nations**

Department of
Economic and
Social Affairs

Thank you.

www.UNPOG.org

Twitter @UNPAN – UN Public Administration Network