

Unleashing the ICT contributions

in DRR and CCA under
the Sustainable Development

Assessment of ICT Applications in DRR

ICT Application	Advantages	Disadvantages
Cell Broadcasting	<ul style="list-style-type: none"> • Not affected by traffic load. • Will not add to congestion. • Messages can be differentiated by cells or sets of cells. • Greater authenticity of message. 	<ul style="list-style-type: none"> • Must be literate. • Phone must be switched on. • Phone must be set to receive cell broadcasting.
GIS and Remote Sensing	<ul style="list-style-type: none"> • Continuous monitoring. • Spatial presentation of data. • Facilitates cooperative effort. 	<ul style="list-style-type: none"> • Require high bandwidth. • Require high-speed networks. • Costly hardware and software • Require skilled professionals. • Difficulty capturing qualitative data.
Internet/Email	<ul style="list-style-type: none"> • Interactive. • Multiple sources can be checked for accuracy of information. 	<ul style="list-style-type: none"> • Low penetration rate. • Must be literate. • Internet content in local languages may be limited.
Mobile Phone (Text SMS)	<ul style="list-style-type: none"> • High penetration rate. • Portable. • Relatively low cost. 	<ul style="list-style-type: none"> • Must be literate. • No indication that message is generated by a legitimate authority. • Subject to congestion and thereby delay.
Radio	<ul style="list-style-type: none"> • One-to-many broadcasting. • Does not require user to be literate. • Portable. 	<ul style="list-style-type: none"> • Less effective at night.
Satellite Communications	<ul style="list-style-type: none"> • Independent of terrestrial communication network that can be damaged by natural hazards. 	<ul style="list-style-type: none"> • High cost of systems hardware and bandwidth utilization. • Unlikely to work indoors.
Telephone	<ul style="list-style-type: none"> • Does not require user to be literate. 	<ul style="list-style-type: none"> • Inadequate penetration rates. • Congestion of phone lines during emergencies. • Disasters can damage infrastructure.
Television	<ul style="list-style-type: none"> • One-to-many broadcasting. • Does not require user to be literate. 	<ul style="list-style-type: none"> • Less effective at night.

ICT in the spectrum of Disaster Risk Management

ICT Roles \ DRM Phases	Risk prevention	Risk reduction	Preparedness and Response	Recovery and build back better
<i>Key Tasks</i>	<i>Improving risk information as basis for investments and business strategies / operations</i>	<i>Reducing the chance of disasters and mitigate the level of disruption, damage & losses</i>	<i>Getting ready to respond to disaster eventuality adequately, appropriately and in timely manner</i>	<i>Being able to restore functions, recover assets and operations, and to build back better</i>
ICT for its own resilience	<ul style="list-style-type: none"> • Not to create / increase risks • Not to exacerbate existing risks • Avoid and transfer risks 	<ul style="list-style-type: none"> • Address the underlying factors of risks • Reduce vulnerability • Increase capacity / protection • Retrofitting • Reduce exposure • Invest in early warning 	<ul style="list-style-type: none"> • System / network continuity plan • System redundancy / backup • Response readiness • Training and drills • Contingency planning • Emergency response mechanisms • Early recovery 	<ul style="list-style-type: none"> • Rapid assessment of damage and losses • Assess needs for recovery • Factor in additional investment to reduce future risks
ICT for society's resilience	<ul style="list-style-type: none"> • Make available ICT to improve risk assessments • ICT as crucial instruments for analysis • ICT to enhance development / business investment planning 	<ul style="list-style-type: none"> • Risk databases • GIS, RS, ST for decision making, planning and mitigation • Knowledge, innovation, education • Enhance coordination • Enhance risk observation, assessment and early warning 	<ul style="list-style-type: none"> • ICT as society' assets to enhance preparedness • Rapid assessment and emergency decision making tool (assessment, mapping, databases, planning) • Enhance emergency / humanitarian communication and coordination 	<ul style="list-style-type: none"> • To enhance rapid assessments and detailed PDNA • To inform more robust future investment within the recovery framework

Priority for Actions

Sendai Framework for DRR 2015 - 2030



1. Improve our understanding of risk

Policies and practices should be based on understanding of the vulnerability, capacity, exposure, hazard characteristics and the environment.



2. Strengthening risk governance

Improved governance to foster collaboration and partnership across mechanisms, institutions, for the implementation of disaster risk reduction and climate change under Sustainable development



3. Investing in DRR for resilience

Public and private investment in structural and non-structural measures to enhance resilience as drivers of innovation, growth and job creation



4. Enhancing risk management

Strengthen preparedness, response and recovery at all levels as a critical opportunity for DRR and its integration into development

[home](#)[about the gateway](#)[login/register](#)[Connect](#)[Explore](#)[Learn](#)

DRM Resources

- Disaster Event Map
- Organizations
- Policies**
- Risk Assessment Inventory
- Sub-regional Intergovernment Organizations

DRM Policies

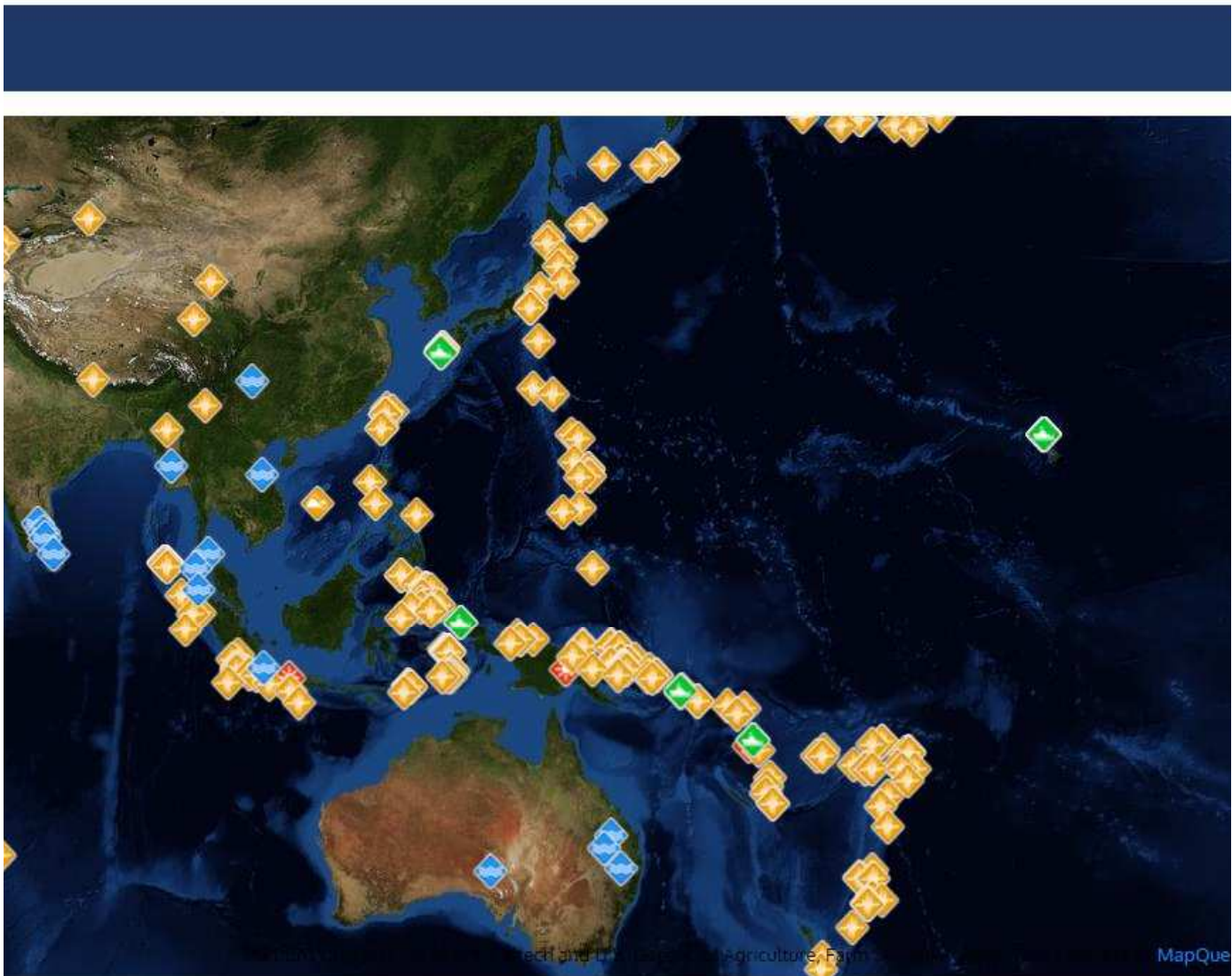
Select location(s)

-All
-None-
Afghanistan
American Samoa
Armenia
Australia
Azerbaijan

Select type(s)

Declaration
Framework
Legislation
National Development Plan
National Plan
Policy
Strategy

	Country	Type
EMI's Mainstreaming Model A model for mainstreaming DRR (Disaster Risk Reduction) produced by Earthquakes in Mega cities Initiative (EMI). http://www.drrprojects.net/drrp/drrpp/framework/78/read		Strategy
National Report in preparation for WCDR (2004) http://www.preventionweb.net/english/hyogo/national/reports/v.php?id=851...		
Strengthening Emergency Preparedness and Response Agencies in the Pacific Island Countries The following outcomes are sought: 1. Improved governance and institutional capability of national fire and emergency service agencies. 2. Improved national and regional emergency preparedness, response, planning and coordination. 3. Enhanced Pacific Island fire and emergency services leadership capacity. 4.		Strategy



Indonesia	Monday, December 14, 2015 - 08:46 to Tuesday, December 15, 2015 - 09:02
Indonesia	Monday, December 14, 2015 - 08:34 to Tuesday, December 15, 2015 - 08:52
laki, Indonesia	Sunday, December 13, 2015 - 13:42 to Monday, December 14, 2015 - 14:12
Russia	Sunday, December 13, 2015 - 13:53 to Monday, December 14, 2015 - 13:23

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_3572

