

Understanding disaster risk	Past and/or on-going activities	Success factors	Problems in implementation
Root causes and disaster risk drivers	FORIN project of IRDR	Studied social processes leading to “risk drivers”	Needs more integrated approach to involve policy-making and practice
Root causes and disaster risk drivers	Study of root causes for the 2004 Indian Ocean tsunami	Found that causes are lack of tsunami early warning system, lack of knowledge and vulnerabilities	Findings are not reflected in policy-makers
Root causes and disaster risk drivers	Study of root causes for the 2010 Haiti earthquake	Found that causes are poverty, political instability and lack of building codes	Findings are not reflected in policy-makers; Root causes still remain
Root causes and disaster risk drivers	Study of root causes for the 2011 Great East Japan Earthquake and Tsunami disaster, including Fukushima NPS accident	Found that causes are under-estimation in tsunami early warning, vulnerability of elderly people, and insufficient assessment of NPS	Vulnerability still remain
Collection, analysis, management and use of disaster data	Establishment of tsunami early warning systems	Tsunami early warning systems are installed in Indian Ocean, Mediterranean and Caribbean Seas	Some countries have problem to maintain the instruments and warning systems
Collection, analysis, management and use of disaster data	Surveys to residents in Haiti	Estimated itemized victims from the 2010 earthquake	Not reflected in official damage estimates
Collection, analysis, management and use of disaster data	Collection of data for the 2011 EJET disaster and publication of white paper	Documented details of the 2011 EJET hazard and disaster	Data are not fully shared and utilized globally
Collection, analysis, management and use of disaster data	Collection of data at World Data Service by NOAA	Data are collected and exchanged among scientists	Data are not fully utilized by other stakeholders

Collection, analysis, management and use of disaster data	Collection and analysis of “unofficial” data from Social Media	Collected non-traditional data such as movement of people from GPS	Some SNS include rumors and unreliable
Periodic assessment of hazards, vulnerability and disaster risk	Damage estimate for future hazard by Japan’s CDMC	Estimated earthquake damage in Tokyo in 2005 and revised in 2013	Room for more improvement of method and data
Periodic assessment of hazards, vulnerability and disaster risk	US FEMA encourages state and local governments to use standard method using GIS	Made 2017 Estimated Annualized Earthquake Losses for US	Not all the state and local government adopted the method
Periodic assessment of hazards, vulnerability and disaster risk	Assessment of Nuclear Power Plant	New scientific knowledge and methods were adopted	Updated assessments were not adopted by TEPCO before the 2011 accident
Mapping risk and disasters	Tsunami hazard maps	Tsunami hazard maps are made by US National Tsunami Hazard Mitigation Program	Maps are not understood by laypeople; vulnerability and exposures needed to be mapped
Interaction among scientists and policy makers	US National Tsunami Hazard Mitigation Program	TsunamiReady communities are recognized	Not all the coastal communities are TsunamiReady
Interaction among scientists and policy makers	Awareness program of Tsunami	Established World Tsunami Awareness Day and conduct periodic drills	Not all the communities are aware of the activity