

Roles of Protected Areas in Disaster Risk Reduction

November 14, 2014

Stream 4; Supporting Human Life

“Protected areas to support human life; food, water and disaster risk reduction”

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Miyako, Iwate Prefecture, 2011, Yomiuri Shimbun



Miyako, Iwate Prefecture, 2011, Yomiuri Shinbun



Lessons from Japan

- Things we could not control and could control
- The role of engineering/technology
- More recognition on the roles of ecosystem services in reducing disaster risks
- Good mix of engineering and ecosystem services

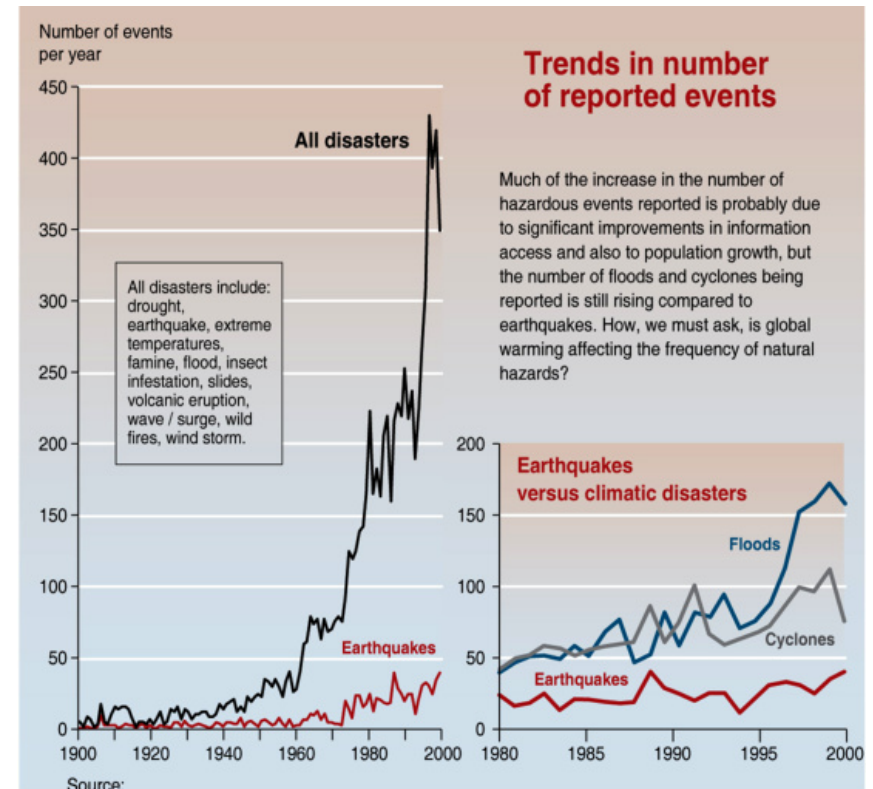


The purposes

Strengthening the role of protected areas in reducing
natural disaster risks

Rationale

- Frequency and magnitude of natural disaster damages
 - Earthquake/Tsunami
 - Volcanic eruptions
 - Flooding
- Vulnerable regions/areas
 - Population density
 - Inadequate Infrastructure
 - Inadequate safety measures



United Nations Environmental Program

Table 1: Impacts of Natural Disasters by Region, 2011

Region	Impact			
	Occurrence (share in %)	Killed (share in %)	Affected (share in %)	Damage (share in %)
Africa	45 (23.0%)	3,104 (10.8%)	740,708 (0.9%)	803 (0.3%)
Americas	49 (25.0%)	1,883 (6.5%)	4,031,124 (4.7%)	22,000 (7.6%)
Asia	87 (44.4%)	23,646 (82.0%)	80,195,914 (94.0%)	256,882 (88.7%)
Europe	5 (2.6%)	22 (0.1%)	25,019 (0.0%)	0 (0.0%)
Oceania	10 (5.1%)	181 (0.6%)	309,362 (0.4%)	10,003 (3.5%)
Total	196 (100.0%)	28,836 (100.0%)	85,302,127 (100.0%)	289,688 (100.0%)

Source:
EM-DAT: The OFDA/CRED International Disaster Database – www.emdat.be,
Université Catholique de Louvain, Brussels (Belgium)

Natural Hazards vs. Natural Disasters

Natural hazards



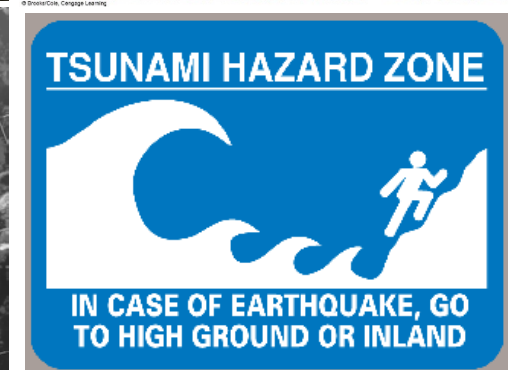
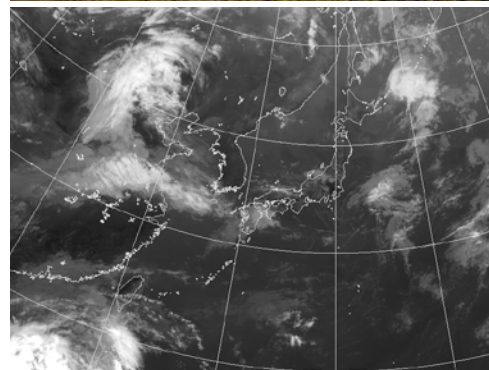
Natural disasters



Natural disaster prevention/reduction

Prevention/reduction

- Engineering/technology
- Population re-distribution
- Prediction
- Roles of protected areas



Roles of Protected Areas

- ❑ Flooding control
- ❑ Landslide control
- ❑ Tidal waves and storm surges control
- ❑ Drought and desertification
- ❑ Fire



Let's do this together!

- Japan has been working to move the PAs for DRR forward
 - Advocacy in Japan, especially following the Great East Japan Earthquake/Tsunami
 - DRR as a key agenda item in Asia Parks Congress
 - DRR as a theme of Stream 4 of this WPC
 - Hosts for the 3rd World Conference on DRR, including launch of the new Hyogo Framework for Action
- PA community engagement to move forward together!