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Habitat map plays an active role for coastal eco-DRR by multi-stakeholders

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Coastal land- and sea-scapes are composed of diverse habitats such as reed bed, salt marsh, tidal-flats, sea grass fields, seaweed grounds, sandy and rocky-shores. Coastal habitats harbor both biodiversity and abundance of coastal lives. These complex coastal ecosystems are sustained by the function of land-sea linked material cycles. Coastal ecosystems provide wide ranges of ecosystem services and processes among natural environments, fisheries, and human livelihoods. Protecting coastal ecosystems secure material cycle, which is fundamental for sustainable human livelihood in coastal communities prone to disasters. In addition, bio-diverse coastal species such as sea grasses, function as nursery areas for commercially important seafood species such as fishes, clams, shrimps, and others. On the other side, coastal ecosystems provide natural infrastructure for both prevention and reduction from hazardous events, known as ecosystem-based disaster risk reduction (eco-DRR). For establishing concept of eco-DRR, we need to prepare precise coastal biological, geological and other data including human and social activities. Habitat map projection is effective way to pile multi-disciplinary data on same GIS grid. Habitat map, thus, provides common data sets to multiple stakeholders, such as scientists, fishermen, local fish markets and local and federal governments for planning coastal management systems.

Earthquakes and Tsunamis should give heavy damages on coastal lives and ecosystems in global scale. Because, more than half of world populations concentrate into vulnerable coastal areas. Together with the conventional hard-infrastructure measures, we have witnessed in previous disasters, that eco-DRR is both affordable and sustainable solution. Eco-DRR should be further promoted, not only in the preparedness and mitigation, but also for the better reconstruction from the disasters so to "Build Back Better". We plan to show a couple of best practices in terms of Eco-DRR activities from March 11, 2011 Earthquake and Tsunamis.