Understanding the Assessment & Data Needs for Estimating the Coastal Protection Services of Philippine Mangroves & Coral Reefs

Workshop Agenda

Aim/Objectives:

1) To familiarize the audience with Approaches for Valuing Coastal Protection Benefits from Mangroves and Coral Reefs with a focus on recommendations from recent World Bank Guidelines;

2) To discuss and identify existing data and data needs for estimating mangrove protection values.

Audience: This training is meant for:

(a) biologists/ecologists/GIS staff that are interested in valuing flood protection benefits, and

(b) risk managers/engineers that are interested in understanding how ecosystems can be considered in their 'standard' models and frameworks.

Technology & Infrastructure Needs: We will require internet access during the workshop. We do not anticipate running computer-based models, but having access on several computers to on-line mapping services will be useful.

List of Training Participants:

1. Philippine Statistics Authority (Day 1 PM session presentation)
2. NAMRIA
3. DENR Bureaus
   -Biodiversity Management Bureau
   -Forest Management Bureau
   - Ecosystems Research and Development Bureau
   - Foreign-Assisted and Special Projects Service
   -Land Management Bureau
   -Mines and Geosciences Bureau (Day 2 PM session presentation)
4. DA – BFAR for mangroves and fisheries (2)
5. Philippine Institute of Volcanology and Seismology (PHILVOCS)
6. Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)
6. Climate Change Commission (1)
7. NEDA (2)
8. PMO (1)
9. Other partners (6):
   EEPSEA (Day 1 PM session presentation)
   UP MSI CCRES (Day 2 PM session presentation)

Date and Time	TOPICS
JULY 25, 2016 (MONDAY)	
9:00 AM – 12:00 PM	**DAY 1: TRAINING/ WORKSHOP** ***General Training: Flood Risk Assessments and Valuing Coastal Protection Role of Coral Reefs and Mangroves*** <u>Presentation(s) on Coastal Risk Assessment and the Role of Nature-Based Defenses</u> *Goal – To provide a general understanding of approaches and tools for assessing flood risk; and the current knowledge on the coastal protection value of reefs and mangroves* 1. Introduction to Workshop, outline of activities and goals (15 mins) 2. Role of Coastal Habitats in Flood Risk Reduction: Review of Current Understanding (30 min) 3. Approaches for Coastal Flood Risk Assessments (30 min) 4. On-line Apps and Tools – Brief Intro to Some Resources including (30 min) -Coastal Resilience, SNAPP Coastal Defence App, Economics of Coastal Adaptation, Mapping Ocean Wealth (Country Snapshots), InVEST 5. Assessing Coastal Protection Value of Reefs and Mangroves (45 min) a. Global Coral Reefs b. Grenada Coral Reef Restoration- presentation and video c. Philippines Country Snapshot - Examination of Philippines Country Stats and Data from Global Analyses (e.g. MOW Atlas)
01:00PM- 5:00 PM	**Presentations by Partners** 1. PSA on mangroves accounting work 2. Valuing protection services in the typhoon Haiyan hit areas- N. Serino et al. 3. Others ***Group Work and Discussion: (2 hours)*** 1. Applying the Engineering Approach to Coastal Habitats 2. Critical Data Needs & Gaps to Be Filled 3. Opportunities and Challenges in Integrating Engineering and Ecology 4. Opportunities, Challenges and Constraints in the Philippines – Intro to topics for Day 2.
JULY 26, 2016 (TUESDAY)	
9:00 AM – 12:00 PM	**DAY 2: TRAINING** ***In-depth Training & Discussion: Assessing the coastal protection value of coral reefs and mangroves at multiple scales in the Philippines*** <u>Presentation(s) on Assessing Value of Nature-based Defenses and Considerations of Different Approaches</u> *Goal – To provide an understanding of the data and tools required for flood risk assessments, and discuss the methods, data needs and next steps*

	for evaluating coastal protection services of coral reefs and mangroves in the Philippines 1. Risk and Hazard Assessment- How do engineers approach coastal risk assessment (30 min) 2. Assessing Coastal Protection Value of coastal habitats – Methods and Models – Part 1 (45 min) a. Methods for assessing natural coastal protection values[1] b. Methods for Cost-Effectiveness Analyses[2] 3. Assessing Coastal Protection Value of coastal habitats – Methods and Models – Part 2 (45 min) a. Special considerations when dealing with coastal habitats – bio-physical[3], economic[4], etc. b. Case – studies and examples[5] 4. Identifying Critical Parameters and Data Needs for valuing coral reefs and mangroves in the Philippines (30 minutes)
1:00 PM – 05:00 PM	*Presentation by participants/agencies on mangrove accounting work* **Presentations by Partners** 1. CCRESS 2. Coastal and Marine Geohazard Mapping Program by MGB *Group Work and Discussion*: (2.5 hours) 1. Critical Data Needs for assessing Coastal Protection Value of coral reefs and mangroves 2. Identifying Key Sites & Scales of Analysis (National to Local) 3. Can we compare Replacement Cost and Expected Damage Function Approaches 4. How can we align work with among the study groups 5. Beyond economy vulnerability - Integrating social vulnerability into the risk assessments

[1] WB WAVES Guidelines, Chapter 4
[2] Examples from WB WAVES Guidelines, SNAPP Papers, BwN guidelines, Economics of Coastal Adaptation App and tools
[3] WB WAVES Chapters 2, 3
[4] WB WAVES Chapter 4
[5] WB WAVES Chapter 6