Mangrove forest and disaster risk reduction and management (DRRM) in the Philippines: Lessons from super-typhoon Haiyan

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As one of the strongest typhoons to hit land, Typhoon Haiyan caused massive damages in the Philippines. In the aftermath, there were anecdotal accounts that mangrove forests helped mitigate the damage caused by the typhoon. To determine the veracity of these reports, we conducted a survey of 870 households among those affected by the typhoon in the provinces of Samar and Leyte, in central Philippines. Our results show that the least number of respondents who recognized the protective functions of mangroves were those who reside in sites with the lowest areas, width, and species richness of mangrove forests. On the other hand, in the sites with the highest mangrove area, width, and species richness, most respondents recognized the protective role that mangroves play. Coastal communities with mangroves experience less typhoon-related housing damage than those living in areas without mangroves. Awareness on the benefits of mangroves is high; but participation in mangrove rehabilitation remained low. The last part of the presentation covers estimates of carbon storage and sequestration of mangrove forests in the Philippines.

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He has more than 40 years of research and development experience in natural resources management and climate change. He is an author of several IPCC reports including the forthcoming sixth assessment report (AR6). He is the executive director of the Oscar M. Lopez Center, a Philippine-based foundation dedicated to promoting evidence-based climate change adaptation measures. He is an affiliate professor at the University of the Philippines at Los Baños.