



SEAGRASS BIODIVERSITY AND CONSERVATION FOR SUSTAINABLE DEVELOPMENT GOALS: A CASE STUDY FROM THAILAND

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Seagrasses are marine flowering plants that occur along coastlines, forming large meadows, which provide nursery, shelter and food for marine life. Thailand, South East Asia, is situated in a seagrass hotspot biodiversity, providing a great opportunity for research as well as their roles as an important coastal habitat. We reviewed our research throughout these years (~ 20 years) together within the SE Asian region to capture the current status of seagrass research in the region. We emphasized on our findings, when we first focused on biology and ecology of some common species, such as *Enhalus acoroides*, *Thalassia hemprichii*, *Cymodocea rotundata* and *Halophila ovalis*; we discovered an additional new record of seagrass in Thailand, *Halophila major*. We examined the ecological roles of seagrass including the habitat complexity, which they provided for marine life and ability to trap sediment and eco-engineering the sediment through their root complexity. Their roles as a home for marine life, where there are various economic species such as fishes, crabs and sea cumpers associated within the seagrass meadows. We also deployed some new technologies such as drone and remote sensing which allow us to work in a larger spatial scale including understand the history of the sites. The tools, which could help us understand, past, present and also the future of the seagrass meadows. Furthermore, these technologies together with some model analyses will allow us to estimate how much carbon accumulation within the seagrass meadows, known as a blue carbon. We understand that not only local livelihoods and dugongs, an endangered species, depend on healthy seagrass meadows but our passions on seagrass research as well. As to help answering the sustainable develop goals, our conservation efforts would be a straight forward answer, but we know that seagrass could do more. We map our research throughout these years and examine what seagrass biodiversity and conservation could contribute to those sustainable goals. We understand that there is still a long road ahead but these are what seagrass and we could do to help contributing to this sustainable world.