

Multiple implications of the restoration of coastal wetland ecosystem and the establishment of a strategic restoration framework

Bong-Oh Kwon¹, Jungho Nam², Kyu-Hee Son³ and Jong Seong Khim¹

¹ Seoul National University, Research Institute of Oceanography, 1 Gwan-ak ro, Gwanak-gu 08826 Seoul, South-Korea
E-mail: bongkwon@gmail.com

² Korea Maritime Institute

³ Korea Marine Environment Management Corporation

Korean society has been recently promoting the restoration of coastal wetlands. These efforts might become the basis of a policy framework that compensates for the limitations of a regulation-oriented policy such as the designation of marine protected areas (MPAs). The shift in government policy could contribute to strengthening the socioeconomic infrastructure of coastal development through the accumulation of ecological capital. Although our scientific efforts and social demands in regard to the ecological restoration of the coastal wetlands have increased during the past years, the bases for restoration in Korea requires that scientific, technological, financial, social and legal aspects be enhanced.

The present study re-examined the concept and attitudes behind coastal wetland restoration in the light of changing circumstances in Korea. Herein, we first defined coastal wetland restoration as “An act of recovering the functions of the ecosystem of coastal wetlands to a state that resembles conditions prior to being damaged.” Next, this study discussed the limitations and future directions of such restoration efforts based on the descriptive analyses of recent restoration practices from social, economic, and technological aspects. Finally, we suggest future policy directions regarding coastal wetland restoration on the basis of a PFST (policy-financial- social-technological) analysis; 1) re-arranging legal mechanisms, 2) setting multi- dimensional restoration goals, 3) establishing a multi-discipline- and convergence- based R&D system, 4) linking spatial management and local development to the restoration, 5) building restoration governance at the local level, 6) implementing an ecosystem service payment system, and 7) applying test-bed projects in accordance with proper directions.