

# Abstract

## **Reviving the Seto Inland Sea, Japan: applying the principles of satoumi for marine ranching project in Okayama, Japan**

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This contribution introduces two Japanese marine ranching projects implemented in the western Seto Inland Sea off Okayama, Japan. These two marine ranches, costing a total of \$USD 40 million, cover 300-500 hectares and are comprised of existing marine reefs (both artificial and natural) and sea grass beds.

In providing organized coastal environments with habitats optimal for nurturing the development of commercially exploited fish species, these artificially enhanced areas are intended to increase the levels of primary production and stock recruitment.

Additionally, parts of these zones are protected as no-take zones or areas where bottom trawling is prohibited; measures were voluntarily implemented by local fishers' organizations.

From the perspective of marine ecosystem recovery, these sites have been created to ensure sustainable marine communities, nurturing not only commercially valuable stocks, but also the larger surrounding environment in this region. Moreover, we hope to ultimately recreate a hydrological cycle that mirrors natural nutrient flow by connecting these networks to local freshwater systems.

These modifications to the coastal ecosystem are based on the Japanese concept of satoumi - coastal, community-based resource management that combines both scientific knowledge and a traditional understanding of the local environment -.