

ENVIRONMENTAL RESTORATION PROJECT ON ENCLOSED COASTAL SEAS (IN AGO BAY)

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‘Ago Bay’ is the most world-famous region as the starting bay on pearl oyster culture. This project deals with efforts to clean up the originally enriched sediment at the bottom of the bay in the continuation of pearl oyster culture spanning 110 years. This bay is a typically enclosed one with very little water circulation. In order to improve the natural self-cleaning capability of the bay, attempts are being made to develop three R&D themes. 1. Development of technologies to create a clean coastal environment: The formation of artificial tidal lands and shallow water areas and the regeneration of seaweed (sea-grass) beds are selected as artificially clean-up methods for the coastal environment. 2. Development of technologies to clean up the bottom sediment: The sediment is contaminated by accumulation of fecal matters evacuated from pearl oysters. We are developing technologies to decompose the organic materials, chemically and biologically and to supply oxygen to the sea bottom. 3. Development of an environmental dynamics simulation model: At the same time, aquaculture systems that comply with the forecasts for water-quality changes are being established in order to protect the marine environment. By promoting such R&D that is related to the improvement of the coastal environment, we aim to establish a center of excellence(COE) that becomes the basis for transferring the results of the R&D both domestically and internationally. Finally, we hope to propose new pearl oyster culture systems that are environmentally friendly.