Marine spatial planning for a resilient and inclusive blue economy: Lakshadweep, India, a pilot study

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Ocean zoning through marine spatial planning (MSP) is an important component of the blue economy and has become an essential step towards realizing ecosystem-based sea-use management. The concept was primarily initiated by the need to create marine protected areas, particularly in the European countries. An even more recent concern has focused on the need to conserve nature, especially ecologically and biologically sensitive areas in the context of multi-use planning of ocean space. To understand the value of MSP in India, a framework was created as part of the Indo-Norway International Ocean Management and Research Initiative. This study provides a framework for MSP in India for sustainable development in an ecologically sensitive area, namely the Lakshadweep group of islands on the west coast of the country. The findings of this study may serve as a reference for better management of maritime regions under various spatial jurisdictions.

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social, economic and institutional perspectives, recognizing their strong interdependences[2]. Even though implementing EBM might be challenging and complicated, the concept of 'blue economy' has emerged as a guiding vision for harnessing the potential of our oceans sustainably and responsibly[3,4].

The blue economy represents a paradigm shift in how we perceive, utilize and protect our marine and coastal ecosystems[3]. It embodies a holistic approach that recognizes the intrinsic link between economic prosperity, social well-being and environmental health[5–8]. This approach seeks to balance the economic benefits derived from ocean-based activities with an imperative to safeguard the fragile and interconnected web of life within our oceans. At its core, the blue economy encompasses a diverse array of sectors and industries, ranging from traditional activities like fisheries and shipping to cutting-edge fields such as marine biotechnology and renewable energy. These sectors collectively constitute a vast reservoir of opportunities capable of driving economic growth, creating jobs and improving livelihoods on a global scale[9]. However, the vision of a thriving blue