Conservation of Coastal Agriculture and Forestry—towards a Sustainable Blue Economy

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Abstract

Blue economy is an economic system or sector that seeks to conserve marine and freshwater environments while using them in a sustainable way to develop economic growth and produce resources such as energy and food. In terms of the global economy, around 90 per cent of all internationally traded goods are shipped by sea, and the market value of marine and coastal resources and industries is estimated at US$3 trillion per year or about 5 per cent of global gross domestic product. Sustainable use of ocean, seas and marine resources, as set out in SDG14, lies at the center of a sustainable blue economy. Sri Lanka’s coastline is 1,340 kilometres and approximately 33 percent of Sri Lanka's population lives in coastal areas that support diverse livelihoods, from fishing to tourism to manufacturing and modern urban services. The coastal areas often provide excellent soil and climatic conditions for agriculture, which has been practiced for thousands of years and plays an important role in the economy of coastal areas. Apart from the traditional rice based farming systems it also comprise of coastal fishing and coastal aquaculture, seaweed cultivation, coconut based cropping systems, commercial cash cropping systems and homestead farming systems. With regards to forests, mangroves, coastal forests, savannah woodlands, dry forests are present in these areas. Further, coral reefs, sea grass beds, salt marshes also play an important role in sustaining the balance as together they provide habitats for biodiversity, food, shade, medicine, products for the industry, protection of the coastline and carbon sequestration. However, these ecosystems are threatened due to numerous factors; climate change (as it induces flooding, shoreline erosion, salinity intrusion, temperature rise), due to conflicting activities such as operational in these coastal areas such as infrastructure including shoreline structures (harbors, breakwaters, tourist hotels), other tourism activities, industry etc. On the face of this, these ecosystems are often in the frontline to get depleted. The habitats are also getting modified due to the increase of toxicity from both inland and marine pollution, invasion of species. Therefore more concerted effort need to be exerted for the conservation and sustainable use of the oceans, seas and marine resources if the country wants to reap the benefits of the blue economy sustainably. As oceans are shared by many countries, actions need to be taken at country, region and even global levels in the areas of regulation, technology transfer, enhancing awareness and education. A mechanism for regular monitoring is a must and this responsibility need to be shared by all the stakeholders. It is imperative to zone the coastal areas so that complementary activities will be lumped together. It is also required to strengthen the already available international agreements between the member countries such as South Asian Seas Programme, Programmes with the International Maritime Organisations, IORA (Indian Ocean Rim Association), BIMSTEC in arriving at regional policies and action plans and implementation of same with proper monitoring. The quantification of the resource is a vital step. It is also important to operationalize the Coastal Zone Management Plans in existence and declare Special Area Management Sites to ensure conservation and sustainable use of these resources.

Keywords: Coastal agriculture, Forestry, Blue economy, Sustainable development goals, Management plans