Sustainable Mangrove Management Offers Tangible Benefits to SIDS

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Thriving mangroves are critical to the future of many of the world's most vulnerable coastal communities. Rich in biodiversity, they serve as nursery grounds for fish and shellfish, while their roots act as a filter for sediment, cleaning up waterways. One of the planet's most carbon-rich ecosystems, mangroves also provide natural protection from storm surges and flooding, whose severity is being exacerbated by climate change.

Perhaps no one depends more on these wetland ecosystems for their livelihoods and protection than coastal communities in small island developing States (SIDS), where 11% of the world's mangroves are found. This proportion has remained steady over the past two decades, but alarmingly, the rate of mangrove loss in SIDS is now increasing, even as the loss rate slows in the rest of the world. Almost certainly fueled by a combination of factors, including anthropogenic drivers and climate change, this trend highlights the need for urgent action to improve the management and conservation of mangroves in SIDS.

Mangrove conservation and restoration in SIDS can contribute to achieving a range of international targets and commitments, including multiple SDGs. These include ending poverty (SDG 1) and hunger (SDG 2) through fisheries enhancement and provision of various forest products, providing work and economic opportunities through fisheries and ecotourism (SDG 8), mitigating climate change as one of the most carbon-rich ecosystems on earth (SDG 13), addressing conservation and sustainable use of marine resources (SDG 14), and contributing to sustainable forest management (SFM) and halting biodiversity loss (SDG 15).

Yet despite their strong potential for supporting valuable ecosystem services to vulnerable small island communities, mangroves are often sidelined in national and international agendas. An initial review of the status of SIDS' efforts to conserve and restore mangroves reveals that stronger governance and institutions are associated with better mangrove conservation and management. However, although mangroves are relatively simple to manage and restore due to their limited floristic diversity, documented cases and best practices for their conservation and restoration in SIDS are sparse. Some data also tend to be unreliable, especially in SIDS with limited mangrove coverage and those with inadequate capacity and resources to produce robust forest monitoring data. Recent developments in remote sensing technologies could do much to fill such voids, helping to establish baselines for the extent, conditions, and restoration potential of mangroves in SIDS.

Meanwhile, there is an urgent need to formulate future policy proposals, harnessing the substantial in-country expertise available in some SIDS, as well as collaboration opportunities between the appropriate government ministries. To that end, the Food and Agriculture Organization of the UN (FAO) and Duke University in the US have joined forces to support advancement in mangrove restoration in SIDS. The first step involves conducting a policy review of mangrove governance frameworks, including three case studies in Fiji, Jamaica, and Mauritius. This initiative aims to identify best practices that could support mangrove conservation, sustainable use, and restoration in the context of the 2030 Agenda for Sustainable Development, post-2020 global biodiversity framework, and the UN Decade on Ecosystem Restoration.

With the right support from governments in SIDS, there is now real hope that recent work in raising awareness on the principles of ecological mangrove restoration can lead to a higher success rate for such efforts in the near future. Our ongoing review will identify recommended steps that governments can take in this direction.

Taking an ecological mangrove restoration approach can improve not only environmental outcomes, but also ensure socioeconomic benefits to local populations. Studies suggest that restoring coastal wetlands such as mangroves can be both practical and cost-effective, with investments at least partly offset by benefits in terms of increased revenues and jobs, coupled with avoided expenditure on natural disaster responses (Saunders et al. 2020, Bayraktarov et al. 2016).

In order to determine the tradeoffs and socioeconomic implications of mangrove conservation and restoration in SIDS, the distribution of costs and benefits must be better understood in each local context. This process will be essential to ensure the design and delivery of mangrove conservation and restoration activities that have the greatest potential for success, in partnership with relevant local and regional stakeholders.

Source: https://sdg.iisd.org/commentary/guest-articles/sustainable-mangrove-management-offers-tangible-benefits-to-sids/