# Insights into Marine Protected Area management throughout the Wider Caribbean Region Información sobre la gestión de áreas marinas protegidas en toda la región del Gran Caribe

### Aperçu de la gestion des aires marines protégées dans toute la région des Caraïbes

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#### **EXTENDED ABSTRACT**

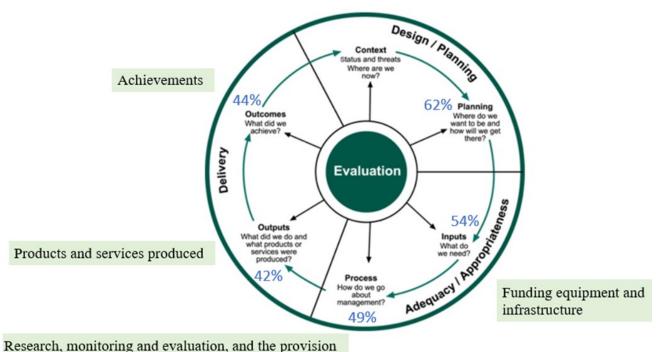
One of the primary tools utilised for the conservation of biodiversity and natural resources within marine and coastal environments are Marine Protected Areas (MPAs). However, the single act of designating an MPA is not a silver bullet and requires effective management to meet set objectives and achieve intended biodiversity outcomes. This is highlighted by Aichi Biodiversity Target 11, which calls for effectively managed protected areas. Management, which generally assumes some active steps to conserve the natural (and possibly other) values for which the protected area was established (Dudley 2008), varies from MPA to MPA based on the biological and social characteristics, pressures and uses of individual MPAs. Regarding MPAs, management encompasses various elements such as the IUCN management category, the presence or absence of no-take areas, governance types, ownership type and the presence or absence of management plans inter alia. To assess the management of protected areas in a standardised format, the International Union for the Conservation of Nature – World Commission on Protected Areas (IUCN-WCPA) developed a framework to guide protected area management effectiveness (PAME) assessments. The framework is based on the idea that good protected area management follows a process that has six distinct stages, or elements which take into account the design and planning, the adequacy and appropriateness and the delivery of the protected area being assessed (Figure 1). The primary aim of this research is to provide insights into MPA management throughout the Wider Caribbean Region (WCR).

The research focused on the 15 African, Caribbean and Pacific (ACP) groups of states within the Wider Caribbean Region. Two global knowledge products, the World Database on Protected Areas (WDPA) and the Global Database on Protected Areas Management Effectiveness (GD-PAME), which are managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) were utilised to garner insights pertaining to the various elements associated with management of MPAs. In addition, data extracted from seven PAME assessments facilitated by the Caribbean Protected Areas Gateway (CPAG) were utilised to gain even deeper insights into the management of regional MPAs. CPAG is an online regional information and resource hub whose mission is to improve the long-term conservation and sustainable use of natural resources by reinforcing the management and governance of protected and conserved areas.

The Caribbean ACP countries have a total marine and coastal area of just over two million kilometres squared. Designated MPAs have been steadily increasing over the past few decades and at present there are a total of 210 MPAs covering just over one hundred thousand kilometres squared and equating to a 5% MPA coverage of marine and coastal area. The majority of designated MPAs (38%) throughout the Caribbean ACP countries are Category IV protected areas (which represent habitat or species management areas) which have a primary objective of maintaining, conserving and restoring species and habitats. Regarding the governance of MPAs, that is the entity responsible and accountable for making decisions about how the MPA is managed, federal or national ministries predominantly filled this role. Notably, not many MPAs utilise a collaborative or joint approach to governance and very few are governed by local communities. The cornerstone of MPA management is the management plan, a document which sets out the management approach and goals, together with a framework for decision making, to apply in a specific protected area over a given period of time. Unfortunately, data pertaining to the presence or absence of management plans for MPAs, along with whether up-to-date or outdated and/or if implemented is generally unreported. A similar situation was found with no-take areas, which have been identified as areas where the taking of living or dead natural resources, inclusive of all methods of fishing, extraction, dumping, dredging and construction, is strictly prohibited, and thus represent the highest level of protection afforded within the marine environment.

Within the GD-PAME, data only exists for 10 out of the 15 Caribbean ACP countries. This either shows that no PAME assessments have been conducted for the MPAs in these counties or that any conducted have not been reported and entered into the global database. Similar to MPA designation, the total number of MPAs assessed has been steadily increasing over the past two decades, but unfortunately, approximately two-thirds of designated MPAs have not undergone any management effectiveness assessments or, if they did, they have not been reported and entered into the GD-PAME. Based on the PAME assessments facilitated by CPAG for regional MPAs, the mean scores for each element (out of a total of 100%) are shown in Figure 1 and highlights the improvements needed in the process, outputs and outcomes elements of MPA management.

Overall, some of the key areas constraining effective management of MPAs throughout the WCR include MPA design, which often times does not cater for larger scale ecological processes; lack of adequate MPA boundary demarcation, inadequate staff numbers for critical management activities, inadequate budgets, lack of up-to-date management plans which are implemented and the lack of accurate and pertinent data needed for informed decision making and policy



of programs designed to benefit local communities

**Figure 1.** IUCN-WCPA framework (adapted from Hockings et al. 2006) used to guide protected area management effectiveness assessments (percentages represent the mean scores for each element [out of a total of 100%] based on assessments facilitated by CPAG)

formulation. For improvements in MPA management within the WCR, there is a clear need for the development of sustainable financing mechanisms to facilitate implementation of management activities. There is also a clear need for movement away from single sector management to multi-sectoral management and the incorporation of approaches such as ecosystem-based management and marine spatial planning. The critical decisions and the formulation of effective policies requires access to accurate, up-to-date data which provides more quality and context. As management is an iterative process, improvement in management requires repeat PAME assessments to be able to continually chart a meaningful way forward. Management plans need to be periodically updated and implemented and there needs to be better reporting at site, national, regional and international levels.

KEYWORDS: MPAs, Protected area management effectiveness, Caribbean Protected Areas Gateway

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<sup>1</sup>The assessment of how well the protected area is being managed – primarily the extent to which it is protecting values and achieving goals and objectives (Hockings et al. 2006).

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