



More than Paper Parks

The effective protection of coastal and marine ecosystems





Mangroves and Shorebirds in the Lamu area, Indian Ocean Coast of Kenya, [Gris Arendal Peter Prokosch](#)



Protected areas are the cornerstone of biodiversity conservation. But designating protected areas without also implementing effective conservation actions risks creating ‘paper parks’: protected areas that exist only on maps. This story is about improving the effectiveness of coastal protected areas.

Every day across the continent, fishermen harvest their catch, herdsman graze their cattle and foresters fell their timber. These activities would not be possible without healthy and productive fisheries, rangelands or forests.

The [IPBES Regional Assessment](#) for Africa summarised the economic value of the continent's ecosystems.



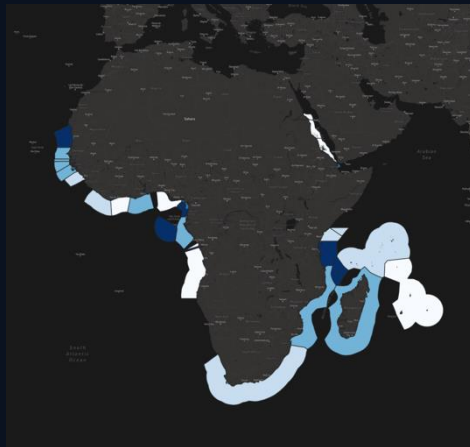
Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES)

Regional Assessment for Africa

Coastal and marine ecosystems supply particularly important services. These include services that benefit the whole world, like oceanic carbon sequestration and storage, as well as other services, like fisheries and coastal protection, that specifically improve the lives of people living along the coast.

These services rely on healthy coastal ecosystems that should be identified, prioritised and conserved

Global Mangrove Watch tracks the extent of mangroves globally and summarises where coverage by these salt-tolerant trees have expanded or contracted between 1996 and 2016.



How much of mangrove habitat is protected? white-blue colors: 0%-100% in 5 classes. Check out in BIOPAMA RIS: <https://geonode-rris.biopama.org/catalogue/#/dataset/569> Source dataset: Global Mangrove Watch

The western Indian Ocean experiences severe tropical storms, so mangroves create a buffer between these storms and vulnerable beachfront settlements. In East Africa, mangroves supply coastal protection worth US\$5000/km²/year.



Photo credit:

@Peter Prokosch

Along with mangroves, coral reefs are key breeding sites for fisheries. In East Africa, these fisheries are worth US\$ 2.5 billion/year. The western Indian Ocean has among the highest species richness of corals, with more than 200 species. Degradation of these coral reef systems would have far-reaching consequences for fisheries, tourism, and overall marine biodiversity in the region.



Species richness at global level



This map shows the locations of World Heritage Sites and Ramsar Wetlands along the African coastline. These sites represent "Outstanding Universal Value", but are threatened by sea-level rise.

Here, cooler blue colours show that most significant sites are currently unaffected by sea-level rise. However, climate change poses considerable future risk..

A decade ago, the 196 signatories of the Convention on Biological Diversity committed to protecting 17% of land and 10% seas during the period 2010-2020. Although nations of the world have committed to expanding protected areas, success has been mixed.

Effective marine protection

Proclaiming protected areas without implementing effective conservation actions risks creating 'paper parks': parks that exist only on maps without any meaningful benefit for nature. Not all protected areas are the same. The IUCN recognises six different categories of protected areas. These range from Strict Nature Reserves (Category I), where biodiversity protection is prioritised and human access is strictly controlled, to Protected Areas with Sustainable Use of Natural Resource (Category VI), where human utilisation of nature is considered one of the main aims alongside biodiversity protection.

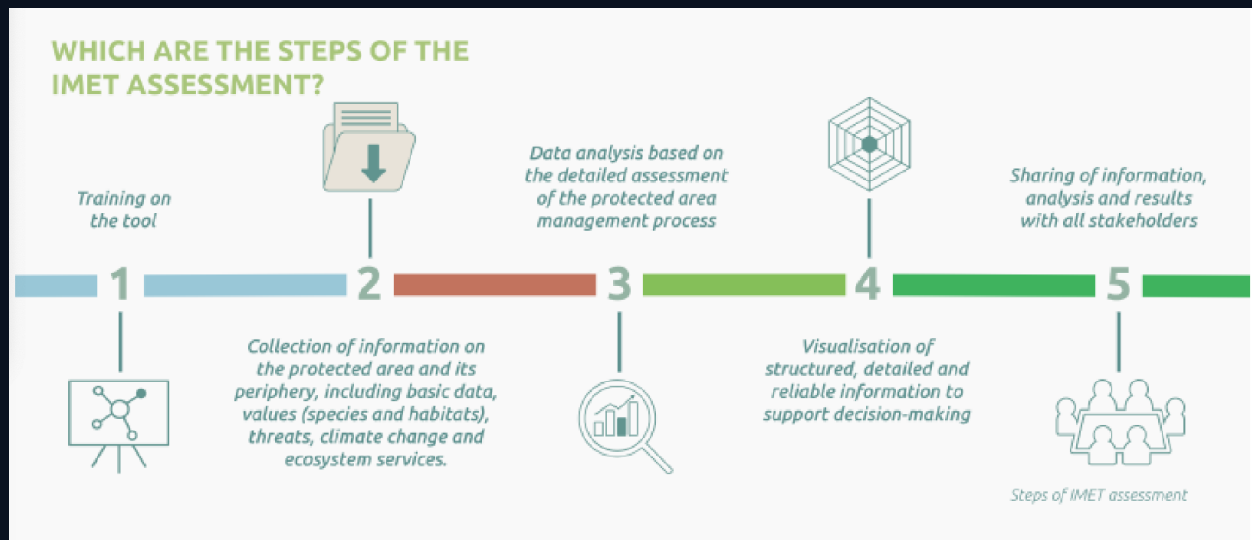
The **effectiveness** of a protected area cannot be separated from its conservation objectives. Moreover, protected area managers should be equipped to meet the specific objectives of their protected areas.

Protected areas management effectiveness can be evaluated using a systematic process. Such a process ought to consider all aspects of management, including the design, adequacy, and delivery of conservation interventions.



This infographic summarises the aspects that should be covered during a management effectiveness evaluation. It includes the all the steps of effective management. These steps are cyclical because lessons learnt during implementation should be incorporated into future planning.

Source: IMETO Integrated Management Effectiveness Tool



Several evaluation tools exist for management effectiveness. One such tool is IMET (Integrated Management Effectiveness Tool
IMET is an approach to support protected area planning, monitoring and evaluation.

IMET includes user-friendly software to support management effectiveness evaluations for both online and offline users.

The software guides users through the management effectiveness evaluation and produces a report in real-time. These real time-reports give stakeholders immediate feedback on management effectiveness.

Applying IMET to Kisite MPA

The Kisite-Mpunguti marine protected area in the Indian Ocean along the Kenyan coastline is made up of two adjacent protected areas.

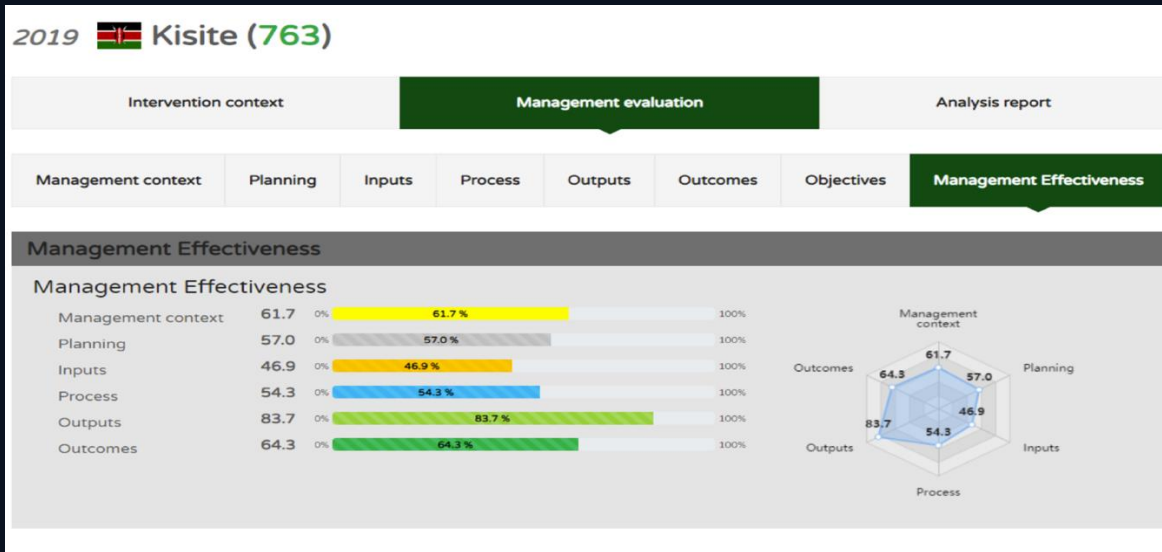
The larger area, Kisite Marine Park, is comprised of a 28km² national park (IUCN Management Category II), where the primary purpose is protecting biodiversity and its associated ecological processes. Both protected areas share a single management plan, which make provisions for different utilisation zones. By contrast, Mpunguti Marine Reserve is a 11km² protected area with sustainable use of natural resources (IUCN Management Category VI). Even though Kisite and Mpunguti have different management objectives, they are managed by the same team from the **Kenyan Wildlife Service**



Kisite IMET workshop. @BIOPAMA.

Members of the Kenyan Wildlife Service, stakeholders and facilitators from BIOPAMA carried out an IMET assessment for Kisite Marine Park.

The collaborative process synthesised management effectiveness and, in less than a week, gave participants an immediate summary of management strengths and weaknesses.



The IMET software supplied participants with a real-time summary of the management progress challenges at Kisite Marine Park. The immediacy of the results are automatically incorporated into a database, where information can be stored, searched and shared with partners.

Policy Context

Management effectiveness of protected areas is critical to meeting the 2050 vision of the Convention on Biological Diversity: **Living in Harmony with Nature**.

The theory of change proposed for the post-2020 Global Biodiversity Framework highlights the importance of creating means of implementation, enabling conditions in a responsible and transparent way.

IMET can support each of these transformative actions.

The European Union has also committed to an ambitious biodiversity strategy , which acknowledges that international partnerships a key to preserving nature. IMET underpins these efforts because it supports the transparent and collaborative evaluation of management effectiveness. Ultimately more effective conservation will reduce threats to biodiversity while also ensuring reliable ecosystem services to meet people's long-term needs



<https://africa-knowledge-platform.ec.europa.eu/>

This StoryMap was compiled for the Africa Knowledge Platform, a project of the European Commission's Joint Research Centre

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