

Five LME Modules are used to assess the changing states of Large Marine Ecosystems. Each of the 5 modules has its own suite of indicators to assess changes in the LMEs and determine whether an LME is improving or deteriorating.

(v) The Governance Module

GOVERNANCE MODULE INDICATORS

The governance module is implementing innovative governance practices in several GEF funded LME projects now underway in Africa and Asia. For the Benguela Current Large Marine Ecosystem (BCLME) shared by South Africa, Namibia and Angola, agreements have been reached among the environmental, fisheries, mining, energy and tourism ministers of the 3 countries to enter into a joint, transboundary, ecosystem-based Commission. They signed an agreement in August 2006 to formally establish the Benguela Current Commission (BCC) that provides for joint management of the goods and services of the Benguela Current LME.

Establishment of the BCC is a culmination of 10 years of effort by scientists, stakeholders, resource managers, and multisectoral ministerial representatives. They began to share their knowledge and understanding of the Benguela Current LME in 1995 during the first operational phase of the Global Environment Facility (GEF) supported BCLME assessment and management project (www.bclme.org/news). The three Southwest African countries will collectively manage transboundary environmental and resource issues including the recovery and sustainability of shared fish stocks, mitigation of the effects of offshore mining and oil and gas production, mariculture, shipping and transport, energy production, tourism, and improving the condition of degraded habitats.

The BCC, in partnership with international agencies and marine specialists, is advancing the understanding of the physical and biological drivers of change, to protect and sustain the highly valued goods and services of the BCLME. The Benguela Current Large Marine Ecosystem Program has allocated US\$10 million in support of 75 scientific and economic research projects in the region. Considerable effort is presently underway to bring the information from each of the five assessment modules together into an integrated ecosystem-based assessment, describing the overall ecological condition and prospects for recovery and sustainability of the goods and services of the LME.

Governance commissions are also being initiated in the Yellow Sea and the Guinea Current LMEs. Elsewhere, the Great Barrier Reef and Antarctic LMEs are also being managed from an ecosystem perspective, the latter under the Commission for the Conservation of Antarctic Marine Living Resources. Governance profiles of LMEs are being explored to determine their utility in promoting long-term sustainability of ecosystem resources (Juda and Hennessey 2001). In each of the LMEs, governance jurisdiction can be scaled to ensure conformance with existing legislated mandates and authorities (Olsen et al. 2006).

In GEF LME projects, both socioeconomic and governance indicators are used in the planning and implementation of 10 years of management actions. They are closely integrated with the findings of science. The 10-year timeline of adaptive management actions is depicted in **Figure 1**. The planning actions, including Transboundary Diagnostic Analyses (TDAs) and Strategic Action Programmes (SAPs), provide the participating countries with the opportunity to jointly prioritize activities, monitor progress over time, and eventually to continue LME assessment and management as a self-financing activity. From Year 1, the GEF supported LME projects move toward the goal of self-financing of the ecosystem assessment and management process by year 10.

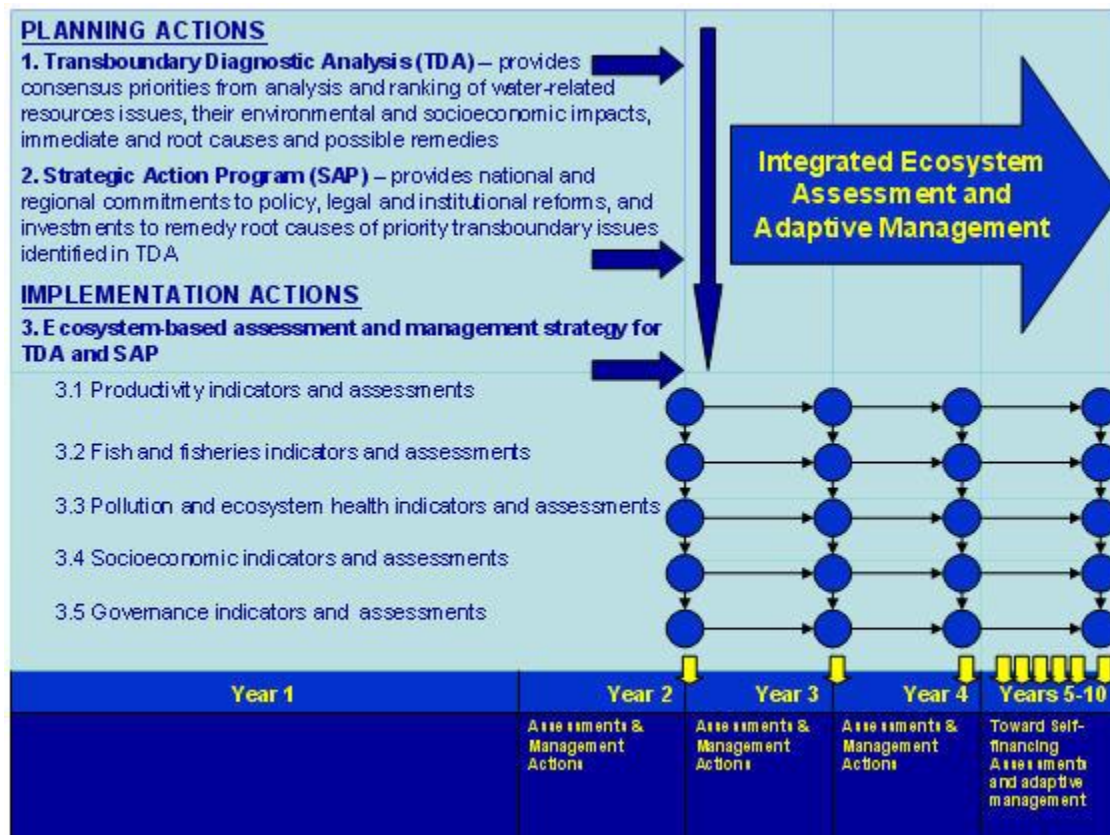


Figure 1. GEF LME Projects: integrated Ecosystem-based assessment and adaptive management planning actions over 10 years.

Selected References

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