

Five UN agencies

FAO

The Food and Agriculture Organization (FAO) of the United Nations leads international efforts to defeat hunger and assist developing countries and countries in economic transition to improve fisheries practices. FAO has focused special attention on LME projects such as the Bay of Bengal LME, the Canary Current LME, and the Yellow Sea LME. An agreement was reached in 2005 with the Norwegian government and FAO for making the *RV Nansen* available at reduced operational costs to LME projects in West Africa. The Canary Current, Guinea Current, and Benguela Current LME projects are conducting joint surveys wherein operations are providing assessment data to implement the modules of productivity, fish and fisheries, and pollution and ecosystem health in the three West Africa LME projects. These surveys have been extended to the Agulhas Current and Somali Current LMEs along the East African coast. The resulting data and information constitute an important contribution to the Global Ocean Observing System (GOOS) and to the Global Earth Observation System of Systems (GEOSS), through international cooperation.

IOC-UNESCO

The Intergovernmental Oceanographic Commission (IOC) of UNESCO advances research and new ideas from the oceanographic community and supports oceanic investigations needing to be undertaken by several nations at once. The IOC hosts the annual LME Consultative Committee Meeting, now in its 11th year. This 2-day meeting brings together the worldwide network of LME scientists and policy-makers for an annual review of LME projects and activities around the globe. Reports have been published and distributed by the IOC and are available online from the UNESCO document website at www.ioc-unesco.org (search for the phrase 'IOC Consultative Reports', to be taken from the IOC Consultative Large Marine Ecosystem Meeting Reports list). The Reports are also available on the LME website at: www.lme.noaa.gov.

UNDP

The United Nations Development Programme (UNDP) addresses poorly managed and uncoordinated human activities across sectors that are threatening shared international water resources and the livelihoods of people who depend on them. Major threats include sea and land-based pollution, depletion of freshwater resources, habitat loss, introduction of exotic species, and over-harvesting of living and nonliving aquatic resources. Addressing these threats, UNDP-GEF projects in the International Waters focal area aim at achieving a comprehensive, ecosystem-based approach to the sustainable management of international waters and to incorporate both developmental and ecological needs. Much of the global marine resources are shared by two or more countries

bordering each of the 64 LMEs, where 80% of the world's fish are caught. The LME projects implemented by the UNDP include the Guinea Current LME (with UNIDO), the Benguela Current LME, the Yellow Sea LME, the LMEs of East Asia (Gulf of Thailand, South China Sea, Sulu-Celebes Sea, Indonesian Sea LMEs), and the Black Sea LME.

UNIDO

The United Nations Industrial Development Organization (UNIDO) is the technical UN agency which brings together skills and expertise on industrial development and environmental protection. UNIDO provides knowledge-based expertise and transfer of environmentally sound technologies for water treatment, waste management, cleaner production, and methodologies for reducing Persistent Organic Pollutants (POPs) in the environment. It partners with the LME program in several International Waters projects supported by the Global Environment Facility (GEF). These LME projects include one that addresses coastal area degradation and living resources depletion in the Guinea Current LME through regional actions (16 countries); a Regional Latin America Integrated Management Project for the Humboldt Current LME (2 countries); and a regional Latin America integrated assessment and management project for the Gulf of Mexico LME (2 countries).

UNEP

(a) UNEP Global Programme of Action (GPA)

Some 80% of the pollution load in the oceans originates from land-based activities (municipal, industrial, and agricultural wastes; run-off; and atmospheric deposition). These contaminants affect the most productive areas of the marine environment, including estuaries and near-shore coastal waters. The health, and in some cases the very survival, of coastal populations depend upon the health and well-being of coastal systems such as estuaries and wetlands. In response to intense pressures put on coastal systems, 108 governments and the European Commission adopted the 1995 Washington Declaration to establish a Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities, to be administered by UNEP. In 2005, the US National Oceanic and Atmospheric Administration (NOAA) partnered with UNEP's GPA in The Hague to assist developing nations in restoring and sustaining the goods and services of the world's LMEs. In keeping with NOAA's 2005 Memorandum of Understanding with UNEP, significant steps forward were taken in assisting countries in planning and implementing LME projects for achieving the objectives of the GPA. The Beijing Declaration (2006) furthered the implementation of the GPA by outlining national, regional, and international actions needed to apply ecosystem approaches, to value the social and economic costs and benefits of the goods and services that oceans and coasts can provide, and to strengthen the implementation of the GPA through the UNEP Regional Seas Programme

and other regional mechanisms. The application of the five LME module indicators of changing ecosystem conditions (productivity, fish and fisheries, pollution and ecosystem health, socioeconomics, and governance) provide useful baseline information from which to measure progress by governmental stewardship agencies toward the recovery of depleted fish stocks, restoration of degraded habitats, and reduction of coastal pollution. These suites of indicators are consistent with measurements needed to quantify progress in the implementation of the ecosystem-based approach to the UNEP GPA and to the UNEP Regional Seas Programme.

(b) UNEP Regional Seas Programme

The 2004 global meeting of the UNEP Regional Seas Conventions adopted a resolution to incorporate NOAA's LME approach and to use LMEs as operational/management units for translating Regional Seas programs into concrete actions. The ensuing partnership linked the Regional Seas Programme and the GEF-LME projects, focusing on the assessment and management of LMEs located in the Regional Seas areas. Proposed outcomes are concrete proposals to improve Regional Seas Programme performance and to promote an ecosystem-based approach in Regional Seas projects. The outcomes of the Regional Seas/LME partnership have included: a table of GEF-LME projects within the Regional Seas areas; an 8-page brochure describing the NOAA-UNEP partnership in Regional Seas; and several contracts between UNEP-Regional Seas and the University of Rhode Island and the Marine Policy Center at the Woods Hole Oceanographic Institute for frontal maps and temperature series for all 64 LMEs, as well as improved estimates of goods and services for selected LMEs within Regional Seas. The UNEP and LME Program partnership also resulted in the preparation and publication of the UNEP LME Report, an initial assessment of changing conditions within the world's 64 LMEs (see **UNEP LME Report**).