

Baltic Sea Regional Project – a Tool to Implement Ecosystem Management in the Baltic.

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Ecosystem management (EM) is defined as integrated management of human activities based on knowledge of ecosystem dynamics to achieve sustainable use of ecosystem goods and services, and maintenance of ecosystem integrity (SGEAM, 2000). Development of this new approach marks a shift in ecosystem management paradigm from individual species to entire ecosystems, from small spatial scale to multiple scales, and from short-term perspective to long-term perspective (Lubchenko, 1994). Humans are recognized as integrated part of the ecosystem, management must re-focus from specific “commodities” to the sustaining of the ecosystem potential to produce goods and services. Much closer linkage with science must be established to implement adaptive management.

Ecosystem approach, that originally emerged as a concept for terrestrial systems has been further applied creating the Large Marine Ecosystems (LME) concept (Sherman, 1999).

European and regional agencies (EEA, HELCOM, OSPAR etc.) are charged with a task to interpret the promising theory of this concept into concrete methodologies to be implemented in the European seas. Ecosystem management is based on holistic assessment of the ecosystem quality (EcoQ) that expresses the structure and function of the marine systems taking into account their biological community and natural physiographic, geographical and climatic factors as well as physical and chemical conditions including those resulting from human activities (TemaNord, 1999). Practically, the Ecological Quality Reference Level (EcoQRL) should be described and a set of Ecological Quality Objectives (EcoQOs) developed and implemented. This challenging task requests fundamental revision of the previous assessment and monitoring systems.

In the Baltic, the GEF funded Baltic Sea Regional Project (BSRP) gets up as a strong tool to assist implementing of EM. The long-term objective of the BSRP is to introduce ecosystem-based assessments, and to strengthen the management of Baltic Sea coastal and marine environments through regional cooperation and targeted, transboundary coastal, marine and watershed activities. To achieve this, three international bodies: HELCOM, IBSFC, ICES, and the countries in the region will utilize project-developed tools and methodologies for sustainable ecosystem management.

The Project will run till 2008 in three phases of which the first will be for 2003-2005 with a total budget of US\$ 12 million. The total project cost is expected to be around US\$40.0 million, of which the GEF Grant will provide US\$18.0 million to the recipient countries: Estonia, Latvia, Lithuania Poland, and Russia. The cooperating countries: Denmark, Finland, Germany, Sweden, Norway and USA, will provide in-kind support from their national and local environmental programs.

Four inter-related components of the Project are:

Component 1 - Large Marine Ecosystem Activities, managed by ICES, aiming to: (i) introduce ecosystem-based assessments and management for the Baltic Sea; (ii) coordinate and integrate the regional monitoring and assessment capacity; (iii) improve management practices to increase and sustain fishery yields and biological productivity of the Baltic Sea LME, and (iv) in the long term, improve both the marine ecosystem and the economic benefits and standard of living of the fishing and coastal communities.

Component 2 – Land and Coastal Management Activities, managed by HELCOM in conjunction with the Swedish University of Agricultural Sciences (SLU).

Component 3 – Institutional Strengthening and Regional Capacity Building and Component 4 – Project Management, which includes the overall project management activities, will be managed by HELCOM.

Fully based on the LME concept, the working structure of BSRP Component 1 includes modules: (1) productivity, (2) fish and fisheries, (3) ecosystem health and pollution, (4) socio-economic conditions, that are implemented by specialized Coordination Centers (CCs). In addition, a coordination center focusing on development of GIS application in data treatment has been created. Nine Lead Laboratories (LLs), all involved in the current HELCOM/ICES assessment and monitoring work, assist BSRP coordination centers. These LLs will coordinate and assist a number of national laboratories to develop their technical

capacity and to ensure that the experts representing beneficiary countries take active part in elaboration and implementation of the ecosystem approach in the Baltic sea ecosystem. With beginning of the active phase, the common tasks for the coordination centers and lead laboratories are: to organize initial coordination/technical workshops in their focus area; to review technical upgrade needs and prepare technical specifications for equipment purchases, to organize and train staff as required for new equipment and techniques; to act as reference centres within their specialty towards other national laboratories; to coordinate compilations, data processing and assessments; to participate in appropriate regional fora and ICES working groups; to assist in the preparation for organized integrated evaluations and assessments and report results to ICES and HELCOM WG/Committees and other bodies. The scientific advise necessary to support BSRP local management units (CCs and LLs) in recipient countries is being produced by 4 specific Study Groups arranged under the ICES Baltic Committee:

- Study Group on Baltic Fish and Fisheries Issues in the BSRP [SGBFF],
- Study Group on Baltic Ecosystem Health Issues in support of the BSRP [SGEH],
- Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD],
- Study Group on Baltic Ecosystem Model Issues in support of the BSRP [SGBEM].

Further information on BSRP may be found on the homepages of the cooperating international bodies: ICES - <http://www.ices.dk/projects/balticsea.asp>, and <http://www.helcom/projectsmeetings/GEF-BSRP>.

Component 1 Organization

