

***GEF***  
***Baltic Sea Regional Project***

***Budget: USD 12 million***

**ICES/LME Activities = USD 5.6 million**

***Period: 2003 - 2005***

# *GEF/Baltic Sea Regional Project*



- *Baltic Sea: Main Characteristics*
- Semi-enclosed brackish water area
- Persistent vertical stratification
- Residence time of water volume: 30 yrs
- Large-scale renewal of bottom-water: unpredictable - often stagnation periods
- Plants/animals: low numbers, stressed
- Low water temperature causing low decomposition rate
- Large catchment area with land-used activities strongly influencing the water quality - population - 85 million

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*Major Threats to the Baltic Sea:*

**Eutrophication**

**Contaminants**

**Overfishing**

**Invasive species**

## *GEF/Baltic Sea Regional Project*

### ■ *Project components*

**1 Large Marine Ecosystem Activities**

**2 Land and Coastal Management  
Activities**

**3 Institutional Strengthening and  
Regional Capacity Building**

**4 Project Management**

# *GEF/Baltic Sea Regional Project*

## *Goals*

- \* **Develop and apply an ecosystem-based management strategy to the BSLME**
- \* **Facilitate strengthening of regional institutions through capacity building efforts**
- \* **Inform and engage stakeholders and decision-makers on the project approach and objectives**
- \* **Assess and evaluate the socio-economic effects of the ecosystem-based management for farming, fishing and coastal communities**

# *GEF/Baltic Sea Regional Project*

## **History**

**1995 Ideas discussed**

**1998 Writing a PDF Block B**

**1998 Core Group established**

**1999 GEF/WB approve PDF Block B**

**2000 Writing draft PAD**

**2001 GEF approve - USD 18 mill of total 40**

**2002 All Project Brief Doc.s written**

**2003 GEF/WB Final approval, 25 February**

**2003 sign Grant Agreem. WB/HELCOM 17 March**

**2003 Implementation start of 1st phase 17 March**

**2003 SG for Implementation of the BSRP 28 March**

**2003 Sign contract HELCOM / ICES May 27 ?**

# GEF/Baltic Sea Regional Project

## The Baltic LME concept

Strengthening technical capacity

**Land**

Training farmers

Grant/Credit on-farm investments. Salmon river rest.

Modeling water quality and nutrient transport

**Coastal**

CZM

Fish stock ass  
Contaminants

MMED

**Marine**

Ships of Opportunity

Joint integrated fish stock ass. surveys

Improved fish landing statistics

Strengthening technical capacity, WS.s

Upgrade laboratories and ships

Improve scientific/and political coordination

**Improvement**

Ecosystem

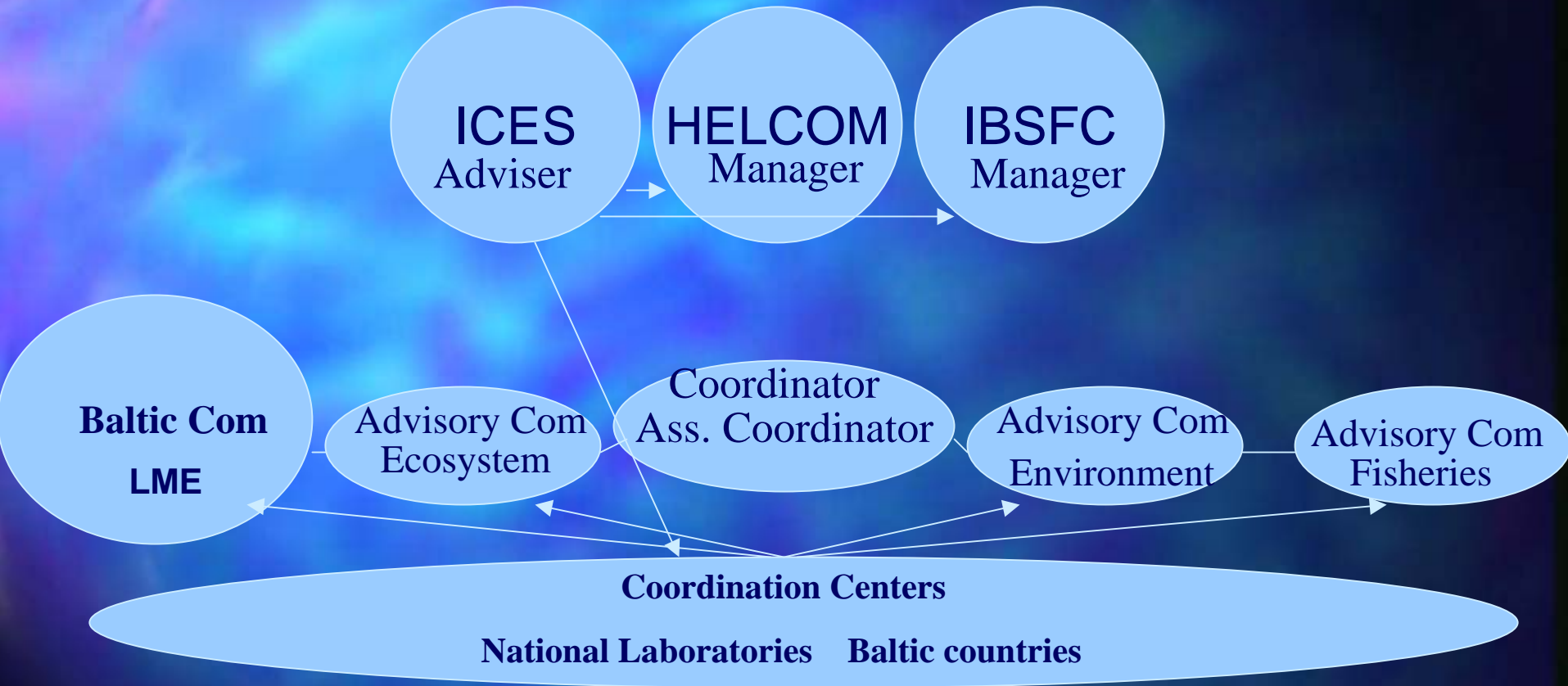
Socio-  
economy

**Management**

# GEF/Baltic Sea Regional Project Component 1 Organization



# *GEF/Baltic Sea Regional Project*



# *GEF/Baltic Sea Regional Project*

## **Lead Laboratories:      Scope of Services**

- To organize a kick-off coordination/technical workshop relative to their focus area.
- To organize and train staff as required for new equipment and techniques.
- To act as reference center within their specialty towards other BSRP laboratories and ICES.
- 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

# *GEF/Baltic Sea Regional Project*

## **Actions during March-June 2003**

- Appoint Assistant Coordinator - Done
- Appoint LPM.s for Coordination Centers - Doing
- Appoint LPM.s for Lead Laboratories - Doing
- 2003 SG for Implementation of BSRP 28 March - Done
- Planning : Organize Kick-off meetings - August
  - Inventory of needs
  - Budgets - procurements
  - Schedules

# *GEF/Baltic Sea Regional Project*

## *Productivity Module*

### Priority Issues

- Assessment of productivity levels in the adversely affected coastal and off-shore ecosystems of the BS
- Application of innovative technologies and buoy systems in environmental assessments
- Identifications of links between land-based nutrient inputs and long-term changes of both productivity and biodiversity in selected areas

# *GEF/Baltic Sea Regional Project*

## *Pollution and Ecosystem Health Module*

### Priority Issues

- Application of ecological quality criteria for the BS
- Implementation of COMBINE
- Eutrophication and biological effects
- Chemical pollution and biological effects
- Invasive species and biodiversity
- Multiple Marine Ecological disturbances, MMED

# *GEF/Baltic Sea Regional Project*

## *Fish and Fisheries Module*

### Priority Issues

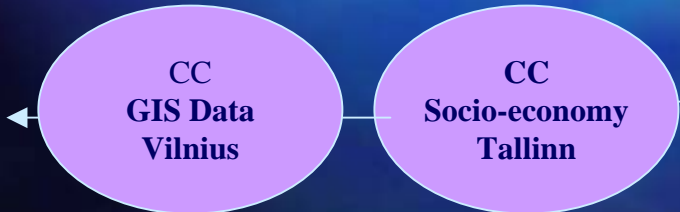
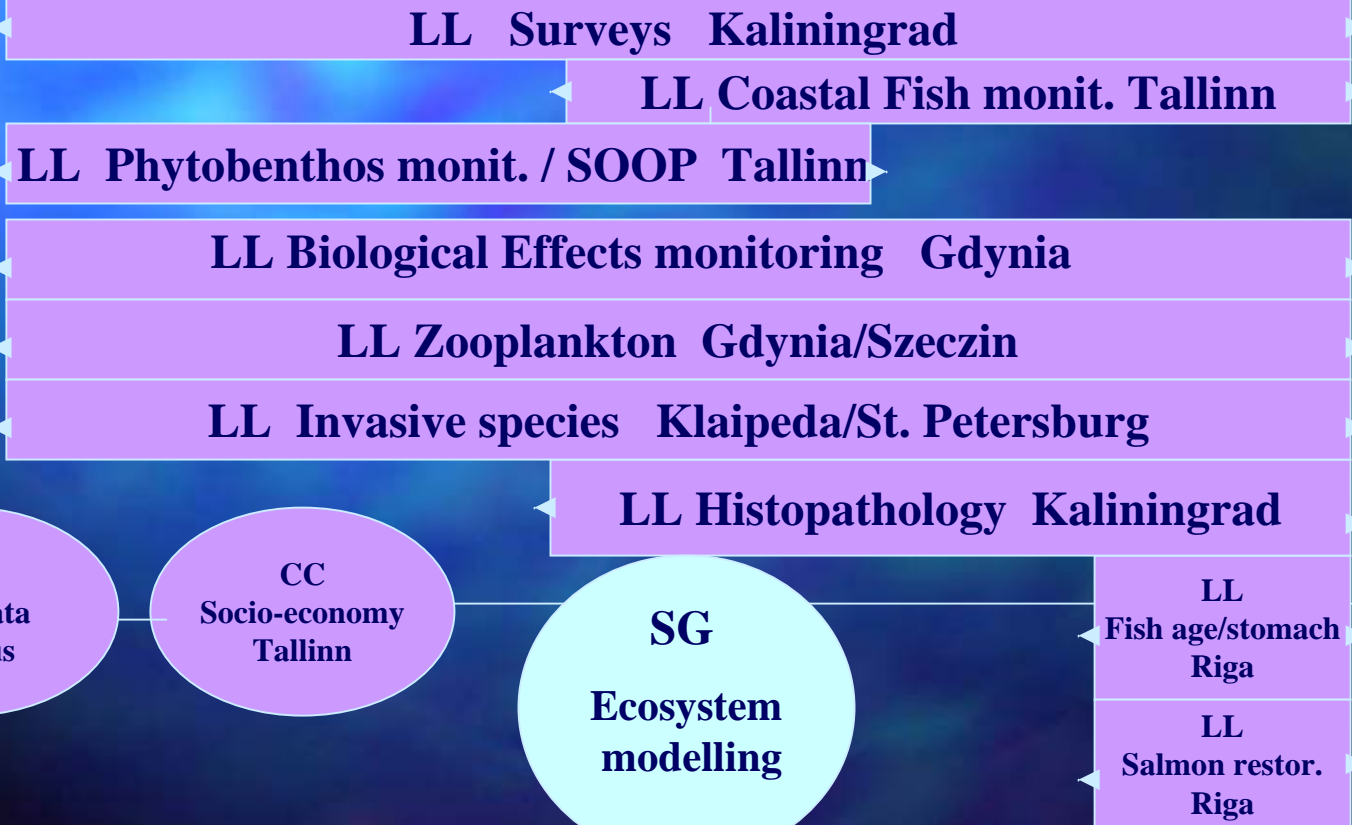
- Improvement of assessment and management scheme for main commercial fish stocks in BS
- Improvement and implementation of assessment and management measures for sustainable exploitation of coastal fish resources
- Implementation of IBSFC Salmon Action Plan
- Evaluation of the impact of fisheries upon the ecosystems of the BS

# GEF/Baltic Sea Regional Project

ICES Baltic Committee



Coope-  
Rating  
Organisa-  
tions a  
projects



# *GEF/Baltic Sea Regional Project*

## *Basic objectives of the proposed subgroups*

- a. Improvement of temporal and spatial coverage of physical oceanographic factors (coarse and fine scale) and assessment of plankton community (pelagic fish growth and feeding).
- b. Improved acoustic estimates of pelagic species abundance and spatial distribution.
- c. GIS data Centre and GIS-database.
- d. Development of environmental-fisheries integrated models for management.
- e. Development of ecosystem health indicators versus indices.
- f. Coordination of joint abundance surveys including stomach sampling (e.g. from market sampling and survey sampling).
- g. Objective to move from single species assessment/management to multispecies assessment/management.
- h. Workshops to develop management models and indicators for sustainable fisheries (both open sea and coastal).
- i. Coordination of Baltic Sea multispecies issues (BSRP, ACFM, ACE, BC, SGMAB, WGBFAS, 6th Framework Task 8).
- j. Promoting the use of Baltic herring and sprat for human consumption (e.g.,<sup>16</sup> dioxin issues); EU regulation and exception until 2006).

# *GEF/Baltic Sea Regional Project*

**A Study Group on Baltic Fish and Fisheries Issues in the BSRP [SGBFF] (Maris Plikshs will be established and will meet in Riga from 27-29 October 2003 to:**

**review existing knowledge on environmental processes affecting fish stock dynamics in both the open sea and coastal areas of the Baltic;**

**determine those oceanographic processes and their temporal and spatial variability in the Baltic that influence the distribution and productivity of the fish;**

**determine those physical and biological processes in the open sea-coastal interaction, which have relevance for fish population dynamics;**

**integrate the above mentioned processes into the enhanced assessment models for commercial fish stocks and new models of coastal fish community structure (in collaboration with SGMAB)**

**SGFEI will report by ? for the attention of the Baltic Committee**

# *GEF/Baltic Sea Regional Project*

A Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD] (Chair: Bärbel Müller-Karulis, Latvia) will be established and will meet in Riga, Latvia from 29-31 October to:

- a) summarise the evidence for links between land-based nutrients inputs and long-term changes of both productivity and biodiversity in eutrophied areas of the Baltic Sea;
- b) commence development of a system of indicators that characterize productivity at different trophic levels in the Baltic Sea that are important to ecosystem-based management;
- c) establish an inventory of available productivity data and characterize their use;
- d) identify information gaps along important trophic transfers in the Baltic Sea ecosystem;
- e) study the feasibility and efficiency of automated methods for productivity data collection (e.g. satellite imagery, ships of opportunity, profiling instrument platforms etc.), in collaboration with BOOS;
- f) recommend measures to adapt the existing measurement programmes to improve the assessment of Baltic Sea productivity within the framework of ecosystem-based marine management.

**SGPROD will report by ? for the attention of the Baltic Committee**

# *GEF/Baltic Sea Regional Project*

A Study Group on Baltic Ecosystem Health Issues in support of the BSRP [SGEH] (Chair: E. Andrulowicz, Poland) will be established and will meet in Gdynia, Poland from 3-5 November 2003] to:

- a) prepare a review of developments regarding ecosystem-based approaches to the monitoring, assessment and management of fisheries and the marine environment, with particular reference to progress in ICES, HELCOM, OSPAR and the North Sea Conference process, keeping in mind the aim of establishing and implementing the ecosystem approach in the Baltic Sea;
- b) further develop the concept of an ecosystem approach particularly adapted to Baltic Sea needs and applications, including at the coastal sub-systems levels, as appropriate for the aims of the BSRP;
- c) elaborate a scheme for the delivery of research and scientific advice for ecosystem-based management in the Baltic Sea area, that is timely and user friendly;
- d) involving: the development and application of a system of ecological indicators and related reference points reflecting the objectives, constraints and state of key elements of the ecosystem in a coherent picture; and
- e) supported by the application of appropriate conservation measures necessary to protect threatened or vulnerable species and habitats.

## *GEF/Baltic Sea Regional Project*

**A Study Group on Baltic Ecosystem Model Issues in support of the BSRP [SGBEM] (Chair: Wolfgang Fennel, Germany) will be established and will meet in Warnemunde, Germany, 17-19 November 2003 to:**

- a) analyse the scientific basis of ecosystem and fishery models of the Baltic and explore possible connections of them in future generations of Baltic Sea models;**
- b define needs for data to initialise and validate models and identify gaps in process descriptions to stimulate targeted measurements;**
- c recommend variables included in the BSRP – monitoring to support future modelling activities.**

**SGFEI will report by ? for the attention of the Baltic Committee**