



**Project title: Coastal and Lagoon Resource Centre (COLAR)**

**Contract: EVK3-2002-00507**

**Project start: 1 December 2002, duration 36 months**

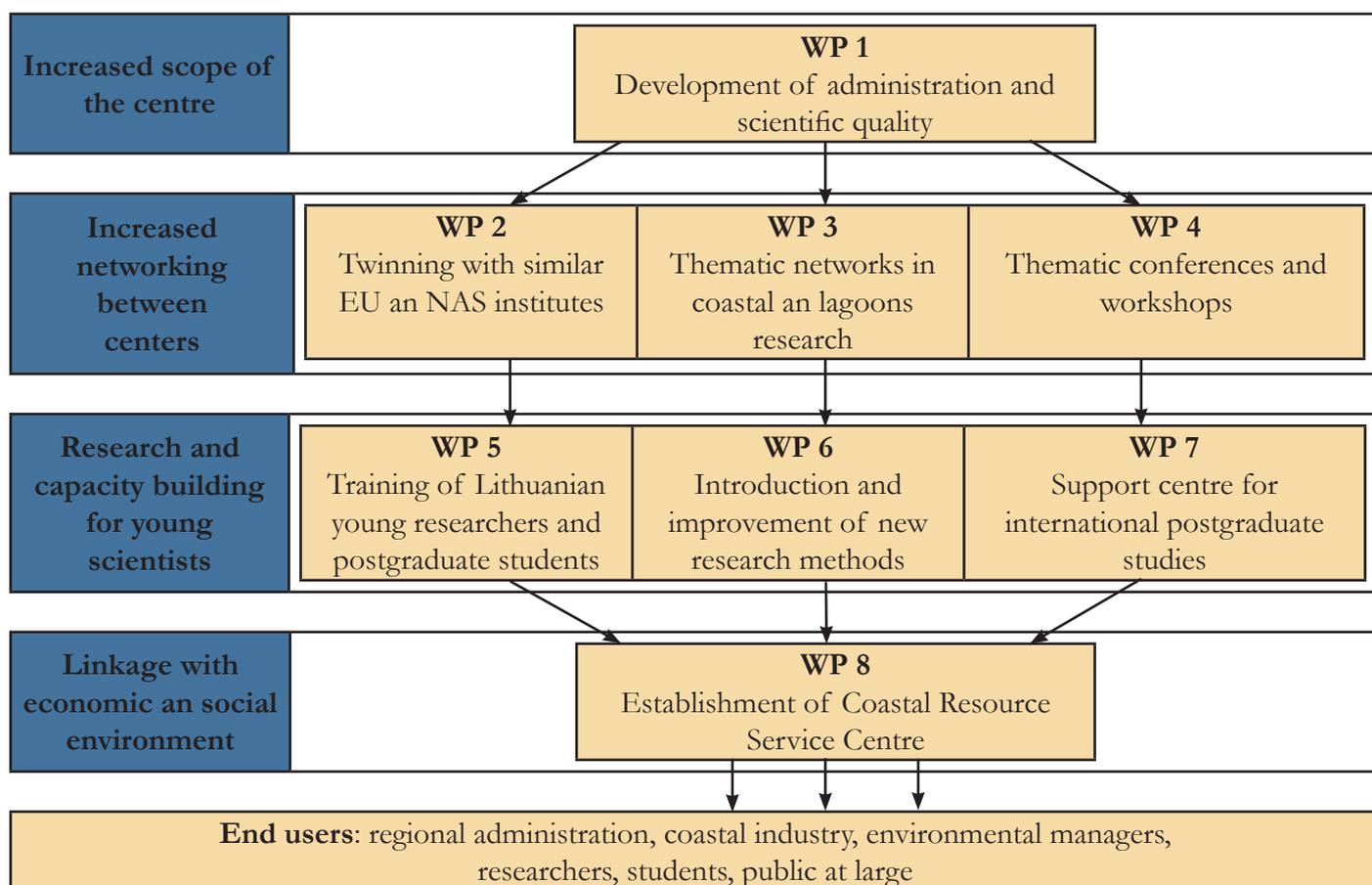
**Objectives:**

- Improvement and extension of existing research and education activities at CORPI.
- Promotion of problem oriented coastal research networks in the South-Eastern Baltic including information technology applications.
- Establishment of a closer co-operation with twin centres involved in coastal research.
- Facilitation of the implementation of the EU Water Framework Directive and the EU Integrated Coastal Zone Management Strategy in Lithuania and other South-Eastern Baltic NAS countries.

Better support for economic and social development in coastal areas of Lithuania and other NAS states by providing interdisciplinary education and expert services.

**Results and achievements:**

Following the objectives of the project results and achievements were organized following the 8 work packages.



## 1. Administrative development of the Institute

Through the project course CORPI organizational structure was developed significantly. The International Advisory Board (IAB) was established consisting of 10 members:

1. **Prof. B. von Bodungen** (Baltic Sea Research Institute, Warnemuende);
2. **Prof. F. Wulff** (Department of System Ecology, Stockholm University);
3. **Prof. H. Hummel** (Netherlands Institute of Ecology, Centre for Estuarine and Marine Ecology, the Netherlands);
4. **Dr. P. Breber** (Institute of Coastal Ecology, Lesina, Italy);
5. **Dr. I. Vuorinen** (Archipelago Research Institute, Turku University, Finland);
6. **Prof. K. Furmanczyk** (Institute of Marine Sciences, University of Szczecin, Poland);
7. **Dr. A. Andrushaitis** (Institute of Aquatic Ecology, Latvia University, Latvia);
8. **Dr. K. Dounas** (Hellenic Marine Institute, Greece);
9. **Dr. H. Queiroga** (University of Aveiro, Portugal);
10. **Dr. R. de Wit** (University of Montpellier, France).

IAB members provided valuable help in delineating research priorities as well as institutional support. It was decided to keep IAB as part of administrative structure of the CORPI after the COLAR end.

## 2. Increased scope of international collaboration (Twinning with Similar EU and NAS Institutes & Thematic networks in coastal and lagoon research)

Increasing of the international scope of the CORPI in view of closer European integration was foreseen as a driving force for the Institute that already had comparatively good and lively co-operation within the Baltic Sea area. During the course of the project a number of new contacts were established. New and fruitful collaboration started in the fields of lagoon modeling, postgraduate studies and eutrophication research, sediment biogeochemistry, estuarine ecology, invasive species, stable isotope analysis application in trophic web analysis, nitrogen fixation and eutrophication.

Within the framework of COLAR two thematic networking activities were planned: expansion of Baltic Invasive Species Network and facilitation of the European Lagoon Network. Regarding the first network most of the work was done by improving the online Baltic Alien Species Database maintained by the CORPI. A number of coherent and synergetic activities were taken within the Baltic Sea Regional Project activities including presentations workshops and preparation of 2 new FP6 projects (ALARM & DAISIE) in the field of European co-operation in lagoon research.

The 2nd International conference on coastal lagoons “European lagoons and their watersheds: function and biodiversity” held in Klaipėda, Lithuania October 4-9, 2005 was widely recognized as great success which apart of the scientific achievements facilitated a number of co-operative decisions. Baltic Lagoon Network (BALLOON) was established as a sister organization to already existing bodies in the Mediterranean. Wider federation of European Lagoon Networks was facilitated.

## 3. Improvement and development of the centre competence, methodological and scientific expertise (Training of Lithuanian young researchers and postgraduate students; introduction and improvement of new research methods)

Five fields of training activity related to main strategic research fields at the institute were undertaken:

- 1) molecular genetics in ecology of water organisms;
- 2) stable isotope methods in food-web analysis
- 2) coastal lagoon modeling;

- 3) improvement of existing research techniques;
- 4) integrated coastal zone management.

Topics of recent PhD students are tightly coupled with one of these research fields.

#### **4. International postgraduate studies**

As the result of this activity the participation in the AEU Joint MSc programme in Coastal and Water Management was achieved. Course programme along with the application procedure is already officially announced at the CORPI site.

Two postgraduate courses were organized: “Analyzing Biological and Environmental Data Using Multivariate Analysis and Multivariate Time Series Analysis” prepared in co-operation Highland Statistic LTD, Scotland, UK and “Environmental Hydraulics”.

#### **5. Coastal Resource Service Centre**

Establishment of Coastal Resource Service Centre was supported by Klaipėda County Head Administration and Klaipėda City Municipality and approved by Klaipėda University senate in April 2005.

The main areas of The Coastal Resource Service Centre activities are:

- environmental data collection, systemization, analysis and presentation to the end-user;
- stimulation of implementation of environmentally friendly technologies;
- implementation of informational technologies and results of natural processes modeling;
- organization of different level education in order to improve environmental knowledge and abilities of integrated coastal zone management;
- stimulation of sustainable use of natural resources and results of applied environmental research.

Coastal Resource Service Centre has collected number of digital databases in which research data and projects results are stored. Available computer models (GENESIS, SMS) allow to simulate natural processes and their changes implementing different applied research projects. Main types of projects coordinated by the Centre are: environmental monitoring, environmental impact assessment (some of these projects was submitted as part of application to Investment Projects financed by EU), risk assessment, consultancies for fishery industry and general plans. During the COLAR project implementation Coastal Resource Centre became an umbrella for integration of Lithuanian and international scientific potential to solve local and regional environmental issues.

### **Conclusions**

Implementation of COLAR brought a strong impulse into the coastal and lagoon research in the South Eastern Baltic Sea area. These activities were put on a sustainable way by formally establishing Baltic Lagoon Network. Special benefit could be mentioned that within COLAR collaboration between Northern –Eastern and Southern parts of Europe in lagoon and coastal research was intensified.

For the CORPI itself, Klaipėda University and Lithuanian marine & estuarine research COLAR provided unparalleled chance to improve international standing, research capabilities and recruitment. This development also provided increase of visibility of South-Eastern Baltic coastal and lagoon systems at large. Most of the project outputs are well sustainable – contacts established during project implementation are already supported by collaborative activity and what is most important for the CORPI a number of young researchers joined the CORPI guaranteeing further progress.