



General Considerations - ESTROM Program (Jürg Bloesch)	“Cercetari Marine” Issue no. 37 Pages 5-6	2007
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The Swiss Agency for Development and Co-operation (SDC) of the Swiss Ministry of Foreign Affairs and the Swiss National Science Foundation (SNSF) have been jointly promoting scientific bilateral co-operation between Eastern Europe countries and Switzerland, since 1990, in the frame of the SCOPES Program. The Romanian-Swiss research programme is developed between Romanian Ministry for Education and Research (MECT), SDC and SNSF.

The new program **Environmental Science and Technology in Romania (ESTROM)** dedicated to Romania took into account the following aspects:

- Relevant problems with national dimension,
- Inter- and transdisciplinarity, combining different scientific disciplines and the involvement of all relevant stakeholders, from researchers to end-users,
- Results transfer into practice and information of the targeted groups and the public

Entirely according to the ESTROM Implementation Plan's recommendation, the Project **Assessment of anthropogenic impacts on Tasaul Lake, Romania, and ecosystem rehabilitation - TASAUL** answered to the Program ESTROM questions, underlining:

- the magnitude of exposure of the Tasaul Lake environment and humans,
- the hazards, risks and pollution sources evaluation,
- recommendation for solutions and measures which should be taken for the protection of the Tasaul Lake environment and bio-potential for humans' health.

Confronting with present numerous difficult environmental problems, Tasaul Lake is part of the Romanian coastal zone and requires urgent actions for rehabilitation of the environment quality, water and aquatic organisms and needs up-to-date know-how. Water quality evaluation is based on the implementation of the *Water Framework Directive of the European Union*.

Two national research institutions from the coastal zone of Romania have been involved in the project (NIMRD “Grigore Antipa” Constanta and “Danube Delta” NIRD, Tulcea), adding the collaboration with the National Administration of Romanian Waters, Dobrogea Littoral Branch, “Ovidius” University Constanta and NGO “Mare Nostrum”, together with the main beneficiaries of the project, permanently involved in the project activities, the fish farms S.C. PESCOM Company S.R.L. and S.C. PESTOM S.A. The Project leadership has been realized by EAWAG, Swiss.



According to the Research Topics, the programme “ESTROM - Environmental Science and Technology in Romania” focuses on capacity building, provides scientific and technical knowledge and solutions for environmental remediation of waters and biological potential.

The objectives of the ESTROM programme are also reflected in the TASAUL Project, by:

- increasing the knowledge and understanding the water environments pollution, affected by chronic anthropogenic contamination;
- evaluating the negative impact of water pollution on ecosystems and human health;
- developing realistic solutions for rehabilitating the environment within the Tasaul Lake;
- proposing the decision makers realistic solutions for water pollution mitigation, for Tasaul Lake protection and rehabilitation, ensuring a continuous and sustainable development.

TASAUL Project proposed to select and evaluate:

- Polluted locations, in monitoring system (on all water variables, including heavy metals, hydrocarbons, pesticides, etc.), round one year long, on the surface network of stations, continuing the assessment in depth, mainly for primary production (all methodologies: phytoplankton, chlorophyll *a*, ^{14}C), being in the close area of Midia-Năvodari Refinery, Navodari City and other chemical local factory and activities.
- Polluted sources as domestic zones, mining areas, agricultural and zootechnic large areas, factories, etc. with all environmental problems associated to their activities, environmental wetlands and lake affluents.
- Way, possibilities, investigations on environmental pollution assessment, developing concepts of sample collection, storage, processing and data interpretation.
- Evaluation of the impact of the dynamics of particulate matter and sediments in surface waters as useful archives for the reconstruction of polluting events and widespread spatial distribution of polluting substances to elaborate and assess measures of remediation.

The ESTROM-Tasaul Project was co-ordinated under the Swiss expertise of the International Commission for the Danube River (ICPDR) and the International Association for Danube Research (IAD).

Preparatory Grants supported the young researchers specialisation, developing their expertise in the field of Primary Production ^{14}C , Hydrology and Coring, Eutrophication.

Implementation Grants also assured:

- the possibility of a meeting of the research team members before of the project starting;
- the organisation of a huge Public Event (five days) with great resonance at different levels of specific profession and social groups (researchers, fishermen, students and different schoolers ages, NGO-s, volunteers and authorities);
- the participation to the 1st European Chemistry Congress Budapest, Hungary, August 27-31, 2006, with the ESTOM-TASAUL Project results.

Very important research, nice activities, events have been realized during the whole duration of the project. The main results are presented in this volume.

The whole research team and beneficiaries are grateful to the ESTROM Program and to EAWAG Swiss coordinator. Tasaul Lake DAY event, established during the project time, remains to be celebrated every year, as a following of this project. It is dedicated mainly to the Tasaul Lake local and professional communities.