Mission Report

16 Mar 2018

**Title and Dates**

Robert Precali Participation in the Training Session Organized With the Egyptian environmental Affairs Agency on Ecological Objective 5: Eutrophication.

Capacity Building Workshop on Implementation of Integrated Monitoring and Assessment Program in the Mediterranean Sea and Coast (IMAP) and Related Criteria(Eutrophication and Marine Litter), 26 – 28 February 2018, Sheraton Hotel, Alexandria, Egypt.

**Summary Action Items**

1. **Primary Objectives of the Mission**

Deliver a Training Course on IMAP and Ecological objective 5: Eutrophication, including the following elements:

* IMAP concept and Ecology objective 5: Eutrophication;
* Good ecological status (GES) EO5;
* Common metadata reporting templates;
* Common Indicator Guidance Fact Sheets;
* Quality Assessment Report on Eutrophication;
* Methodology and Protocols;
* Croatia example-

1. **Key Observations and Conclusions**

* The participants welcomed the shared information IMAP and Ecological objective 5: Eutrophication; My first impressions were that the participant were to homogeneous and that the shared knowledge to demanding for most of them. The simultaneous translation to Arabic, due to a lot of scientific term was also probably a challenging issue;
* My opinion is that capacity building meetings need to be organized with smaller groups, with more expertize in the field. Information on the methodologies, lists, protocols are highly desirable by the countries;
* There is a feeling that we need to further explain IMAP and EcAp at national level in order the competent authorities and officers fully understand their function;
* Eutrophication indicator parameters were discussed. The list includes three categories of parameters: parameters related to water typology, parameters related to nitrogen and phosphate nutrients, and the key indicator, Chlorophyll a with supporting parameters as water transparency and dissolved oxygen. The need to standardize the approaches, the analysis methods, the methods of implementation and optimization of the network of observation stations, and the frequency of monitoring was part of the main discussion;
* **The need for adequate choice of methods of statistical processing and mapping of monitoring results, according to the participants, deserves to be the subject of a specific training module**;
* **Given the variability of environments and ecosystems, and their vulnerability to eutrophication, it was recommended to establish a monitoring system adapted to the context of the Egyptian Mediterranean region; The ongoing one (even extensive) is more tailored for the beach monitoring concept, but can be a solid base for the implementation of an IMAP concept after an analysis of the existing data**.
* The monitoring of the coastal belt of the Egyptian Mediterranean coast from Salloum to Rafah (1998 – 2017) were originally conducted six times per year (bimonthly). In 2002 the sites of monitoring were reduced to 30 sites instead of 47 and carried seasonally. In the process of establishing the monitoring programme, Danish Aid Authority (Danida) has supplied the Institute of Graduate Studies and Research (IGSR) through EEAA with equipment, training and scientific technical assistance. **Therefore ISO- guide 17025 is applied for all analysis and measurements conducted in the present project, and this fulfill very high standard of quality assurance and quality control (QA/QC) for all the obtained data.** Now the Water Pollution and Marine Environment Lab. (WPMEL) at IGSR is internationally accredited according to ISO/IEC 17025:2005. **The parameters which are investigated are: Depth, Conductivity, Salinity, Temperature, pH, Dissolved oxygen, Total suspended matter (SPM), Nitrate, Nitrite, Ammonia, Total nitrogen, Total phosphorus, Phosphate, Silicate, Chlorophyll** a. Sampling are performed with an inflatable rubber boat (Zodiac) and Rotteners bottles were used for collection of water samples for the different campaigns.
* **On behalf of the existing data the eutrophication assessment criteria/water type reference conditions and boundaries have to be built**. First, the typology of the area has to be determined and on top the various relationship between pressures and effects established. As the main area is Type IIIE and is influenced by a big river input probably, a specific Typology of water should be developed. In addition, a suitable measure of pressure has to be chosen in order to develop appropriate assessment criteria/water type reference conditions and boundaries. When this effort will be realized there will be a need for the monitoring redesign and optimization. At that moment a need for coordination between the relevant departments and the operationalization of IMAP will requires further capacity building meetings and resources. Resource mobilization towards these aspects should be supported;
* There is a great need to support countries in data processing, data handling and quality assurance;
* There is also a need to include a training on contaminants; together with marine litter and eutrophication;
* Further small-scale meetings should be conducted for the coordination of the corresponding activities;
* The presentation from Marine Litter by Dr. Christos Iokemidis and Dr. Thomais Vlachogianni were excellent and were highly appreciated by the participants;
* Is it possible countries to report to MEDPOL on IMAP implementation every 6 months? It would enhance a lot the actions at national level.

1. **Key meetings**
2. A Meeting with the representatives of the Alexandria University Dr Asmaa Othman and her team (two more ladies) was organized the 28 Feb, when the others participants were on Marine Litter training, and a few hours extensive training through the statistical concept of GES threshold implementation for EO5 performed.
3. **Contact Persons Related to the Outcome of the Mission**

Ms Tatjana Hema, Deputy Coordinator UN Environment/MAP

Ms Jelena Knezevic, MED POL Programme Officer

1. **Annexes**
2. Workshop presentation with the supporting materials