



**Report on the INECO Algeria
Stakeholder Workshop**
“Protecting the Seybouse waters from pollution”
Annaba, Algeria
Saturday, January 19th 2008

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1. Introduction

The Algeria Stakeholder Workshop aimed to promote discussion on the pollution of the Oued (River) Seybouse. The meeting brought together about 60 participants, including the representative of the Ministry of Water Resources, stakeholders from the entire river basin area (Annaba, Guelma, Tarf and Souk Ahras), from the Departmental Directions of Water (DHW), the Directions of Agricultural Utilities (DSA), the Directions for Environment and Health, the National Agency for Water Resources (ANRH), the National Office for Irrigation and Drainage (ONID), the National Office for Sewage (ONA), the Chambers of Commerce and Industry, Chambers of Agriculture, locally elected officials, national gendarmerie, academics, industrialists and journalists.

The debate was moderated by the General Director of the Water Basin Agency (ABH) and four experts:

- Prof. Dionysis Assimacopoulos, Professor at the National Technical University of Athens (INECO Project coordinator);
- Prof. Bernard Barraque: Head of research at the CNRS, France
- Dr. Jean Marc Berland: Project Manager at the International Office for Water
- Prof. Hocine Bendjoudi, from the University Paris IV, France
- Mr. Tahar Aichaoui, Director of Studies and Hydraulic works

This document presents a summary overview of the event, and details its major outcomes. Further information on the event can be obtained from the INECO web site, at <http://environ.chemeng.ntua.gr>.

2. Event overview

The workshop was initiated with a presentation on the INECO project, its objectives and methodology. Then, an introduction was made to the discussion topics, through a brief presentation of the current status of the Oued Seybouse and the causes to the significant deterioration of water quality currently experienced in the region. The discussion that followed was based on:

- A problem tree, analyzing the possible causes to water pollution. Causes already identified comprise institutional and regulatory restrictions, problems with law enforcement, insufficiency of financial resources and lack of awareness among the general public and industrial users. Participants provided further information and insight to the problem, according to their experience, judgment and perceptions.
- An objective tree, defining ways and steps towards problem mitigation.
- Suggestions on possible options.

The workshop was complemented with a brief overview of the workshops held in other countries involved in the project: Egypt, Lebanon, Tunisia, Syria, and Cyprus. Similar problems tend to emerge from the studied cases; a synthesis of findings in the form of a comparative analysis might be interesting.

3. Discussion outcomes

Following the above presentation, a discussion was initiated among the participants. The main conclusions drawn from the debate were related to **shortcomings** and **suggestions**, and are summarized below.

3.1 Identified shortcomings

Shortcomings identified by participants were related to:

1. Technical issues, where there is lack of knowledge on:
 - The sources of water pollution and the regular monitoring of water quality and pollution evolution. Actions undertaken by technical institutions should not be restricted to the management of specific incidents/events.
 - Pollution hotspots, as the monitoring network is not dense enough.
 - Specific characteristics of pollution sources.
2. Economic and financial issues, where there is lack of knowledge on:
 - The real status of the different funds available, and especially their use for environmental purposes.
 - The actual financial support offered to industries for the installation of wastewater treatment units in relation also to their own investing capacity.
 - What are the actual financial supports for the cleaning up required by industrialists (estimated costs for the treatment units), and what are their investing capacities in this field.
3. Law enforcement, and especially to the operation of the water police, which is still inadequately equipped and protected.
4. Efforts to raise awareness among water users and especially industrialists and farmers, on practices that can lead to an increase of production but also to a decrease of pollution. It was pointed out that the pollution of resources can evolve to an insurmountable obstacle to production, especially in the agricultural sector.

3.2 Suggestions

Participants suggested the following:

- Acceleration of data acquisition for the basin, according to the programme given to the Basin Agency or the ANRH, with contribution from the University, but on the basis of a contract and clear payments.
- Strengthening of awareness programmes and actions towards manufacturers and farmers, but also towards the locally elected officials.
- Enhanced coordination between the different departments in charge of monitoring and control: Water Resources, Health, Environment, Industry and Agriculture.
- Acquisition of mobile laboratories, able to undertake random, but also regular inspections.
- Increased efforts to implement laws on water pollution, particularly with regard to the obligations of polluting industries to provide information on loads and quality of discharges, and to the prohibition of discharging industrial waste in the sewerage system without prior advanced treatment.

- Enhancement of the economic and financial knowledge, particularly with regard to the possibility of using special funds from the Ministries of Water Resources and of Environment. Possibly, financial incentives for installing wastewater treatment plants can be provided through inter-ministerial coordination and be in the form of contracts with specific industrial branches.
- Building of capacity of the water police, possibly through the establishment of a main department, in charge of monitoring environmental violations and through coordination with the different security bodies.