



*Egypt Stakeholder Workshop "Building a vision for mitigating  
water pollution in the Dakahlia Governorate"*

*Saturday, July 21<sup>st</sup> 2007*

*Workshop Minutes*

## **1. Introduction**

The INECO workshop, titled "Building a vision for mitigating water pollution in the Dakahlia Governorate", was held at the Conference Hall of the Mansoura Childrens' Hospital of the Mansoura University. The workshop was organized under the supervision of:

- Prof. Dr. Magdy Abou Rayan, President of Mansoura University and Chairman of the Industrial Water and Sanitary Drainage Project Center (INECO Regional Partner), and
- Prof. Dionysis Assimacopoulos, School of Chemical Engineering, National Technical University of Athens, Greece and Coordinator of the INECO Project.

This document comprises the minutes of the workshop, and is organized as follows:

- Section 2 outlines the presentations made during the workshop on water pollution issues in the Dakahlia Governorate and in the Basandeila area.
- Section 3 presents the main recommendations and outcomes of the workshop.
- Section 4 comprises the minutes of the Discussion Session, between citizens of the Basandeila area and local authorities' representatives.

## **2. Presentation Session Summary**

During the first session of the workshop, presentations focused on the impact of water pollution, with particular focus on issues concerning human health. In more detail:

- Prof. Dr. Ahmed Mansour (Professor of Pediatrics and Vice Dean of The Faculty of Medicine of the Mansoura University), focused on the "Environmental and Health Impacts of water pollution".
- Prof. Dr. Ebtehal Mohamed Kamal (Professor in the Faculty of Agriculture of the Mansoura University) focused on "The Role of Rural Communities & Guidelines on agricultural practices for water pollution mitigation".
- Dr. Ahmed Rakha, on behalf of Dr. Gamal El Saeedy, Director of the regional branch of the Environmental Affairs Agency of East Delta Region presented "The Role of Regional branch of Environmental Affairs Agency of the East Delta in protecting water resources from pollution".
- Eng. Mohamed Ragab, Chief Of the Technical Support Division in the Dakahlia Water & Sanitary Drainage company, representing also the Major general Ahmed Abdeen,

Head of Dakahlia 's Water & Sanitary Drainage company, presented the situation on "Water & Sanitary Drainage in the Dakahlia Governorate ", and described the current situation regarding the provision of potable water.

- Prof. Dr. Eman, PhD of Sociology, Faculty of Arts, Mansoura University, focused on the "Psychological impact of pollution on the individual and society".

Furthermore, Prof. Dionysis Assimacopoulos, the INECO project Coordinator presented the methodology and scope of the INECO project. Prof. Dr. Samy El Fellaly, from the Egypt INECO team, outlined the analysis of causes and effects of water pollution in the region of Basandeila.

### **3. Recommendations**

The main outcomes and the recommendations drafted from the workshop were the following:

1. A permanent dialogue should be established among official bodies responsible for health and pollution prevention and control, and the corresponding beneficiaries, with the aim to analyze the factors that contribute to the problem and try to address them.
2. Views of all people concerned should be collected; this can be effected by encouraging all to fill the corresponding online questionnaire at the INECO web site.
3. Water available for potable water uses should be increased.
4. There is need for the rehabilitation of distribution networks in order to prevent mix with discharge.
5. Using active carbon to absorb toxic substances, as well as other substances produced from the interaction of chlorine used for disinfection, and organic materials.
6. A survey of water networks should be performed, in order to map the problems per village, assess their severity and inform people on how to deal with water.
7. In areas of high risk, provisions must be made to provide bottled water at a very low price.
8. Egyptian standards for drinking water must become stricter. Mechanisms for real control of water quality should be developed, including trained personnel and laboratory equipment.
9. Simple, traditional ways should be sought in order to enable citizens to access safe water when (a) they do not have access to public water services or (b) there is a failure in the water supply system.
10. Instead of using drainage water for irrigation, new water supply sources should be sought.

11. Awareness on water resource protection and conservation should be enhanced, also through the organization of educational programmes on polluting activities and practices and on the current, significant environmental issues.
12. Practices that have adverse effects on water quality should be prohibited.
13. All sewage treatment stations should be equipped with modern technology.
14. Laws that allow for the disposal of industrial waste only after full treatment should be activated.
15. Disadvantaged villages must be supplied with sanitation and clean water services.

#### **4. Discussion Session: Summary of issues raised during the workshop**

Basandeila village residents participated in the workshop, by presenting their views and questions on the status of the Basandeila Nile Branch. Eng. Mohamed Ragab, who is a representative of the local Water Utility, replied to all questions. Issues raised and corresponding replies are presented below.

##### **Eng. Ahmed Atyia Younes, on sewage treatment in Mansoura:**

Water is very polluted; Law 124 prohibited fish farms to use Nile water and water from the drainage canals, because it would lead to the production of contaminated fish. Furthermore, the existing water treatment stations do not remove pesticides and pollutants originating from the drainage canals.

##### **Reply of Eng. Mohamed Ragab (Head Of Technical Support in Water & Sanitation Drainage Dakahlia ):**

In stations, water is mixed and passed through filters; there is no filter that can provide a water ratio above 90%; we are trying within the limits of our ability to deliver water of acceptable quality. With regard to fish farms, there is sewage treatment; however, water quality has deteriorated due to the previous uncontrolled disposal of sewage without treatment. However, water has been tested in the laboratory, and test samples have shown that water would not have side effects on animals.  
the animals.

##### **Dr.Ibrahim Yousef on the rehabilitation of the Compact Unit:**

Most of the existing units are old, some may have been constructed in the 1960s, and we haven't heard of rehabilitation or technical control of their operation.

##### **Reply of Eng. Mohamed Ragab:**

Compact units are much smaller than the drinking water treatment plants installed in the cities. Their operation is not complicated to require technical control. Any trained technician can easily ensure their operation.

**Sherif Mahmoud, Broadcaster in the Mansoura University Channel and Student in the Faculty of Commerce in the Mansoura University):**

How can we avoid the very high concentration of chlorine in drinking water? The repair of breaking pipes is taking a long time, and they break again.

**Reply of Eng. Mohamed Ragab:**

Chlorine is used for disinfection in all countries and not only in Egypt. We use quantities that have been calculated. Sometimes, the dose can be slightly increased, but it is certainly not harmful. Pipe repairs depend on the region; the process can take a long time in one area and much less in another. Our goal is to completely rehabilitate the distribution network.

**Mohamed Saad from Temay al Amdid (Student in the Faculty of Commerce of the Mansoura University, from the Mansoura University Media Center):**

- What is the role of local community councils in villages for the control of equipment used for pumping drinking water?
- We heard that there is a project for the installation of a sewerage system in our village, about 5 years ago. Nothing has happened yet.
- Water supply in our village is interrupted for a long time. Furthermore, is drinking water getting mixed with sanitary drainage water?
- Water is insufficient in many places and not only in Dakahlia. There are a lot of promises for projects and reforms.