

## “Capacity Building and Strengthening Institutional Arrangement”

### Analysis and sampling of water and water pollution

## “Presentation of the workshop”

**Mr. Gaetano Battistella**

APAT

Agency for Environmental Protection and Technical Services

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## 1. APAT-EEA Project ‘Capacity building and Strengthening Institutional Arrangement’

The program “Capacity Building and Strengthening Institutional Arrangement” aims at strengthening the technical and institutional capacity building of Egyptian Environmental Affairs Ministry and other environmental affairs Institutions through sharing technical, scientific and management knowledge and experience in order to develop the required and specific skills.

In this context APAT will help the Egyptian Ministry for Environmental Affairs:

1. To strengthen the capacity of Egyptian Environmental Affairs Agency (EEAA) to develop the Egyptian Environmental Data Yearbook
2. To develop general training programs in various environmental fields, according to EEAA requirements and indications, and to implement awareness programmes for most feasible areas or sectors of intervention.

# 1. APAT-EEA Project ‘Capacity building and Strengthening Institutional Arrangement’ (II)

Project: “Capacity Building and Strengthening Institutional Arrangement”

Technical assistance for  
 “Environmental Data Year  
 Book”

General Training

Training to Technical  
 Assistance for  
 “Environmental Data  
 Year Book”

Thematic Experts

Training  
 Course A

Trainers/  
 Experts

Training  
 Course B

Trainers/  
 Experts

Training  
 Course C

Trainers/  
 Experts

Training Subcomponent  
 Environmental Awareness  
 Building

Trainers/ Experts

# 1. APAT-EEA Project 'Capacity building and Strengthening Institutional Arrangement' (II)

Previous workshops carried out, after the Kick off meeting”:

- Environmental Awareness Building, 3<sup>rd</sup> – 6<sup>th</sup> December 2005;



# 1. APAT-EEA Project 'Capacity building and Strengthening Institutional Arrangement' (III)

- Capacity Building for EEAA Training Departments, 19<sup>th</sup> – 23<sup>rd</sup> February 2006;



- Capacity Building for EEAA Training Departments (Advanced), April 2<sup>nd</sup> – 6<sup>th</sup> 2006;



# 1. APAT-EEA Project 'Capacity building and Strengthening Institutional Arrangement' (III)

Other photos related the workshop carried out



# 1. APAT-EEA Project 'Capacity building and Strengthening Institutional Arrangement' (III)

• Analysis and sampling of air and air pollution, 14<sup>th</sup> – 18<sup>th</sup> May 2006





## 2. 'Analysis and sampling of water and water pollution' program

The workshop 'Analysis and sampling of water' is organized in 5 modules including specific working groups, with facilities provided by EEAA and the main goal to share APAT and EEAA previous experiences and technical know-how about sampling and analysis of water, following EEAA indications.

### ◀ 'Analysis and sampling of water and water pollution '

1st Module: WATER POLLUTION AND ENVIRONMENTAL IMPACTS

2nd Module: WATER TREATMENTS

3rd Module: INTEGRATED COASTAL ZONES MANAGEMENT

4th Module: WATER POLLUTANTS ANALYSIS AND CONTROL

5th Module: ENVIRONMENTAL ANALYTICAL METHODS (SOIL) INCLUDING ELEMENTAL ANALYSIS AND ORGANIC CONSTITUENTS

## 2. 'Analysis and sampling of water' (I)

### First Module : "Water pollution and environmental impacts"

APAT-EEAA: "Brainstorming" (based on experiences)

- Adoption of conceptual models to integrate data about water quality, in order to elaborate reports;
- Environmental training of experts to use these models;
- Environmental studies of industrial areas with high population density;

APAT-EEAA: "Brainstorming" (based on experiences)

- Elaboration of guidelines regarding how to respect the national and international law about water (marine, lakes, underground, etc.);
- Development of planning systems to assess the water monitoring system

APAT-EEAA: Working group n° 1

"Design and check an example of a conceptual model in order to achieve the purposes of the laws about water"

## 2. 'Analysis and sampling of water' (I)

### Second module: "Water treatments"

APAT-EEAA: "Brainstorming" (based on experiences)

- Adoption of oil indicators and environmental training (tankers, platforms, treatment system, Ecoports);

APAT-EEAA: "Brainstorming" (based on experiences)

- Optimization of sustainable use of water, including desalination technology;

APAT-EEAA: Working group n° 2 "Define a draft of Guidelines for wastewater environmental monitoring in seas"

## 2. 'Analysis and sampling of water' (I)

### Third Module: "Meteorology and coastal zones"

APAT-EEAA: "Brainstorming" (based on experiences)

- Reports about maritime meteorological conditions;
- Application of system of costal impact analysis;

APAT- EEAA: "Brainstorming" (based on experiences)

- Wave dynamics (direction, frequency, height);
- Water discharges to the sea;
- Fisheries and aquaculture statistics;

APAT-EEAA: Working group n° 3 "Define a system for coastal zones monitoring network"

## 2. 'Analysis and sampling of water' (I)

### Fourth Module: "Water pollutants analysis and control"

APAT-EEAA: "Brainstorming" (based on experiences)

- The modern technology for water analysis (Chemical and Microbiological);

APAT- EEAA: "Brainstorming" (based on experiences)

- Environmental sampling (water);
- General principles on equipment used for environmental analysis (ICP-MS, AAS, IC, GC-MS, HPLC, microbiological tests)

APAT-EEAA: Working Group n°4

"Define applicable criteria for water pollutants concentrated on microbiological sampling analysis and control"

## 2. 'Analysis and sampling of water' (I)

Fifth Module: “Environmental analytical methods (Soil) including elemental analysis and organic constituents”

APAT-EEAA: “Brainstorming” (based on experiences)

- Environmental sampling (soil);
- Environmental analytical methods (soil);

APAT-EEAA: “Brainstorming” (based on experiences)

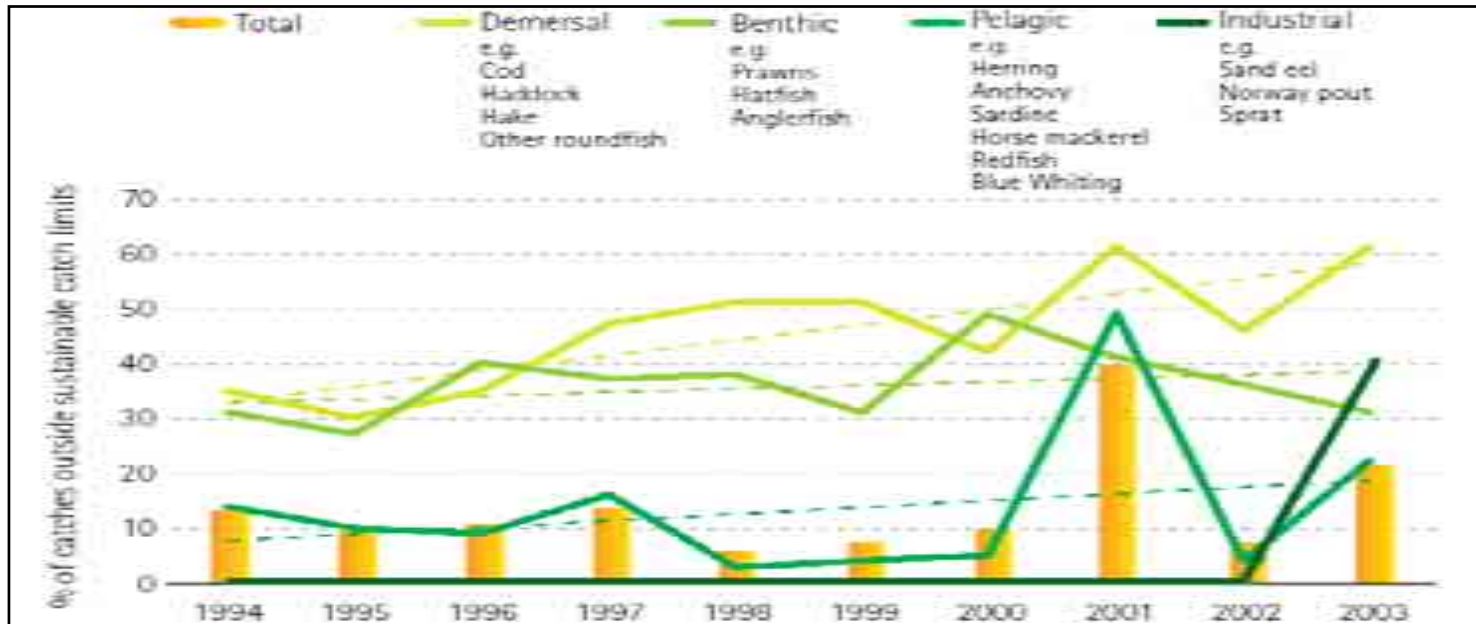
Quality control in the environmental laboratories for accreditation (reference materials, certified reference materials, calibration, control chart, proficiency testing);

APAT-EEAA: Working Group n° 5

“Define a procedure for soil sampling, analysis and control”

### 3. Water indicators (I)

#### FISHERIES - Catches outside safe limits



In 2003 22% of total catches were outside safe biological limits marking a substantial worsening compared to 2002 (8%). While the situation of benthic stocks improved since 2000 (31% stocks outside safe biological limits in 2003), demersal stocks, have shown a constant deterioration (61% in 2003).

In 2001 and in 2003 some important pelagic and industrial stocks, which supply large catches, fell out of outside safe biological limits for the first time, causing the large variations in the indicator for these years.

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- ▶ Training Courses and Divulgation
- ▶ Environmental Awareness
- ▶ Small Municipalities Divulgation
- ▶ Environmental e-learning
- ▶ Environmental Education

## Environmental Education and Capacity Building

APAT carries out technical and scientific activities of national interest, linked to the mission of protection of the environment, by means the elaboration, assessment and promotion of programs of divulgation and training on environmental protection. The Agency also provides technical coordination of environmental training activities to the Regional and Provincial Agencies for the protection of the environment, in order to share operational methodologies at national level to carry out institutional tasks, and gives technical and scientific support to the Ministry for Environment and Territory, and, by means of specific agreements, to other Administrations and Public Bodies.

APAT develops activities to promote environmental capacity building, to transfer scientific and technical know-how for environmental protection and to enhance environmental awareness, particularly through:

- design and management of National, European and International projects
- active partnerships in international Networks
- environmental training courses and seminars
- organization and coordination of internships and internal stages
- environmental e-learning through internet
- diffusion of methodologies and knowledge to support the small Municipalities Decision Makers.



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- active partnerships in international networks
- environmental training courses and seminars
- organization and coordination of internships and internal stages
- environmental e-learning through internet
- diffusion of methodologies and knowledge to support the small Municipalities Decision Makers,
- environmental education activities and projects,
- coordination of the inter-agencies working group for Environmental Communication, Information, Training, Education (CIFE).

[\[ Continue \]](#)

### Highlight



**Workshop "Analysis and Sampling of Water and Water Pollution"**  
 Cairo (Egypt), 11th-15th June 2006

Workshop "Analysis and Sampling of Water and Water Pollution" promoted by the Service for Environmental Education and Capacity building addressed to EEAA's experts.



**Laboratory Course on Environmental Education, IV Module "Education on Biodiversity"**  
 Venice, 30th-31st of May 2006

This training module, organized by ARPA Veneto within the CIFE Laboratory Course on Environmental Education, deals with the relevance of education on biodiversity to promote sustainability. It foresees seminars and working group activities in which participants are involved in planning activities for education on biodiversity and, on board of an ecological boat, in an itinerant laboratory along the Venice lagoon's canals and islands.

[News Archive](#)



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## Environmental e-learning



### Analysis and Sampling of Water and Water Pollution - Capacity Building And Strengthening Institutional Arrangement



The course is aimed to provide specific knowledge about water pollution and about its impacts on environment, deepening the different aspects related to water treatments, meteorology and coastal zones, water pollutants analysis and control, quality control and accreditation.

The contents of the course are developed within the Egyptian and Italian Cooperation Programme on Environment and therefore they are available only for the EEAA's technicians and of other Egyptian environmental institutions.

[›› Training Course](#)

#### Available Courses

- › Air
- › **Water**
- › Soil
- › Nature and Biodiversity
- › Environmental Culture and Sustainable Development

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**Analysis and Sampling of Water and Water Pollution - Capacity Building And Strengthening Institutional Arrangement**

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**Water**

**Analysis and Sampling of Water and Water Pollution - Capacity Building And Strengthening Institutional Arrangement**

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MODULE 1		
Water Pollution and Environmental Impacts		
Unit <b>1</b>	Presentation of the Workshop Mr. Gaetano Battistella - APAT	<input type="checkbox"/>
Unit <b>2</b>	Adoption of conceptual models to integrate data about water quality, in order to elaborate reports Ms. Maria Giuseppina Farrace - APAT	<input type="checkbox"/>
Unit <b>3</b>	Environmental training of experts to use these models Ms. Maria Giuseppina Farrace - APAT	<input type="checkbox"/>
Unit <b>4</b>	Environmental studies of industrial areas with high population density Mr. Gaetano Battistella - APAT	<input type="checkbox"/>
Unit <b>5</b>	Elaboration of guidelines regarding how to respect the national and international law about water (marine lakes, underground, etc.)	<input type="checkbox"/>

## 4. References

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