

# The final phase of the works for the realization of the Constructed Wetland System in Narta's School, Vlore, Albania

The fourth mission to Albania of the ARPAT expert, Architect Paolo Anella, was carried out from 12 to 18 December 2007

The mission was carried out in the framework of the IDEASS activities for the promotion of "Constructed Wetlands" in Albania, in collaboration with GEF/UNDP (Global Environmental Fond) project, AULEDA (Local Economic Development Agency), the Albanian Ministry of Environment and Local Authorities of Narta village.

The innovation consists in an innovative natural water purification process developed in Italy by the Regional Agency for the Environmental Protection of Tuscany (ARPAT). The "Constructed Wetlands" system takes advantage of a process that occurs spontaneously in nature, and it make use of biological agents to provide higher water purification levels. A similar system for the natural water depuration is going to be realized for the first time in Albania. The "Constructed Wetlands" system offers the most economic and environmental solution for the depuration of the waste water, comparing with traditional ways.

The mission to Albania of Architect Anella was held from 12 to 18 December 2007.

The main objective of the last mission of the ARPAT expert Architect Anella, was to provide technical assistance to the Albanian engineers and technicians, during the final phase of the works for the construction of the Constructed Wetland system in Narta's School.

The previous ARPAT's mission to Albania of the two experts was held from 12 to 21 August 2007. The main objective of the mission was to provide technical assistance in order to start with the implementation of the Pilot Project for the natural depuration of waters in Narta's School. The ARPAT experts also organized training activities directed to Albanian environmental engineers and technicians involved in the implementation of the Pilot Project.



The mission to Albania of ARPAT experts was financed by Acque Ingegneria Srl (Pisa Italy). The works for the implementation of the Constructed Wetland System in Narta's School started up on August 13 2007. The ARPAT expert Architect Anella, provided technical assistance to the Albanian engineers, and to the involved technicians, and supported them during the starting phase works for the implementation of the Pilot Project in the Primary School of Narta, from 14 to 21 August 2007

## Meetings in Vlora (13 December 2007)

On the mission activity first day, the working group meeting was opened by the IDEASS National Coordinator Mrs. Uruci who presented the work agenda for the final phase of the works for the realization of the Constructed Wetland system in Narta's School.

The meeting with the working group was organized at the offices of AULEDA (Local Economic Development Agency).

The engineer, the technicians of the Albanian constructive enterprise involved in the construction of the Constructed Wetland System in Narta's School, and the ARPAT expert, Mr. Anella discussed exhaustively the project's technical details.

## Meeting with the Local Authorities of Narta village

A meeting was organized with the Local Authorities of Narta village in the late morning.

The ARPAT-IDEASS-AULEDA delegation met the Mayor of Commune Qender, Mr. Fredo Berberi. The meeting with the Local Authorities of Narta village was organized at the office of Mayor of Narta village.

During the meeting with the Local Authorities of Narta village, the IDEASS National Coordinator presented to the Mayor of Narta village the first phase of implementation of the Pilot Project and the final phase of the works for the realization of the Constructed Wetland System in Narta's School.

The IDEASS National Coordinator, Mrs Uruci made a short presentation on every further step of the Initiative for the realization of the Pilot Project, including the process of the choice and the placement of the various species in the free water system. The appropriate plants will be taken directly from the Narta's surrounding area. This process will be realized by the specialists of Institution of Agro Transferring Technology of Vlora city, added Mrs. Uruci.



In the second phase of the Pilot Project, the system will be monitored during 9 months. The monitoring process will be realized by the experts of Public Health Department utilizing the laboratories of analysis of PHD in Vlora. UNDP/ ART GOLD Programme in the framework of the IDEASS activities will continue to provide the project with technical assistance of the Wetland experts of ARPAT (Agency for the Environmental Protection of Tuscany Region) and the technical assistance of Segnores Italy, - *Partners for Development*, which is a volunteer

association established in 1994, based on the solidarity spirit of international co-operation, and operating through retired (or on the verge of retirement) qualified people. The data resulting from the water analyses will be compared to the EU standards.

The UNDP ART GOLD Albania Programme will also contribute with financial support in rehabilitation of the play area of Narta's School, and the realization of a didactical path, said Mrs. Uruci,

The Mayor of Commune Qender Mr. Berberi, highly appreciated the efforts made by all the actors involved in the implementation of the Pilot Project in Narta's School until now. The Mayor stressed that it is indispensable to proceed as soon as possible with the rehabilitation of the play area of the School, which is the most frequented zone by the children.

Mr. Berberi announced to the ARPAT-IDEASS-AULEDA delegation that the Commune Qender evaluating the implementation of the Constructed Wetland System in Narta's School, has contributed financing the rehabilitation of the school surrounding discharge channel which was always blocked from sewage.

The Mayor of Commune Qender, Mr. Berberi thanking the participants for the work carried out, assured all the possible support to the initiative.

### Field visit on Narta's School (13<sup>th</sup> -14<sup>th</sup> December 2007)

From 13 to 18 December 2007 the mission focus and personnel moved to the work site. The ARPAT expert, Architect Anella provided technical assistance to the Albanian enterprise specialised in construction of natural depuration system; and to the involved engineers and technicians, and supported them during the final phase of the works for the realization of the Pilot Project in the Primary School of Narta.



On the second day of mission activity was organized, in the work site, a meeting with the students from Tirana University, Environmental Engineering of the Faculty of Civil Engineering. In order to transfer know how to Albanian students, the ARPAT expert, Architect Anella, realized training activities directed to the students. Architect Anella presented a detailed description of the Constructed Wetland System for the treatment of wastewater of the Narta's School. The students observed themselves the work done in the FVS and SFS system.



The construction of a natural water depuration pilot system represents an important step in the further implementation of this methodology, on a wider scale, in Albania. The pilot system will allow the Albanian experts, technicians, authorities and students from the Environmental Engineering of the Faculty of Civil Engineering to experiment the waste water treatment, to check the analytical data about the system depuration capacity, to demonstrate the system suitability to be extended at a larger scale.

In Albania, many important natural areas suffer critical environmental condition, due to human pressure, soil erosion and water pollution. One of the most relevant, among them, is the Prespa Lake situated on the Macedonia-Albania-Greece frontier, with an elevation of 2,800 feet (853 m) above sea level and an area of 106 square miles (274 square km). Fed by underground streams, it is linked by subterranean channels with Lake Ohrid. Most of the lake is in Macedonia.

The Prespa watershed region, shared by Macedonia, Albania and Greece, is a habitat for a multitude of wild animals and plants. The ecosystem of the Prespa Lake is threatened by the use of pesticides by local farmers, dumping of waste, and unsustainable use of natural resources.

On the mission activity second day was organized a meeting with the representatives of Prespa Community interested in the project's extension.

The engineer of the Albanian constructive enterprise specialised in construction of natural depuration system and the ARPAT expert, Mr. Anella informed the representatives of Prespa Community about the characteristics, the potentialities and the advantages of the Constructed Wetland System for the treatment of wastewaters.



The representatives of Prespa Community expressed the high interests in the Pilot Project, and proposed the realization of the Constructed Wetlands System in Prespa's villages. They confirmed the intention to fully collaborate with the UNDP/ ART GOLD/IDEASS Initiative, and with the Regional Agency for the Environmental Protection of Tuscany (ARPAT) for a possible extension of the Constructed Wetlands System in Prespa.

UNDP ART GOLD/ IDEASS supervised the activity carried on and coordinated the local personnel involved in the Project.



With refer to the carried on technical works, the technical progress report by the ARPAT expert, Architect Anella, is attached.