

newsletter

EU.WATER

Third issue

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**Dear Readers,
it is a crucial time for EU.WATER project.**

Following the delivery of the vulnerability maps that measure the water stress factors detected in every rural pilot regions (namely, dispersion and pollution due to intensive fertilization) and the current analysis of the codes of good agricultural practices traditionally implemented by farmers and technicians in every areas, EU.WATER partnership is now focused on the definition of a Transnational Strategy for the Integrated Water Management in Agriculture (TSIWMA) that represents the roadmap to transfer across South East Europe knowledge and patters for a (economic and ecologic) sustainable and scientific agriculture in line with EU standards (WFD and Nitrate Directive).

The necessity of a consolidated scientific basis to validate the strategy has required a testing phase: five pilot actions have been developing in Italy, Greece, Hungary and Romania. The preliminary results of these pilot actions are currently available on the project website and the useful indications to optimize water consumption and to reduce nitrate pollution will contribute to make the results effective and ready for a large ownership among farmers and stakeholders both in the project areas and at SEE Programme level.

The next EU.WATER phase is to scale down the TSIWMA's drivers at local level: this will facilitate the decision-making process of policy-makers through the application of regional plans for a more efficient nitrogen distribution and irrigation (and in general to provide upgraded managing strategies for integrated water management in agriculture) that benefit of a wide scientific horizon. In the meantime, the awareness campaign is intensifying all over the project areas - by targeting the rural communities and the specialized stakeholders with the advantages deriving from the acquisition of EU.WATER environmental-oriented models - and it will end up with the final conference scheduled in Budapest on 23rd and 24th of April 2012. Save the date!

Marco Meggiolaro
Project Coordinator



Sizing vulnerability as driver for a sustainable water management in agriculture

The water resources are under many pressures in the agricultural areas, e.g. depletion, quality degradation etc.

The new EC Directive 2006/118 on the protection of groundwater against pollution and deterioration, developed under Water Framework Directive 2000/60, sets out criteria with which to assess the chemical status of water bodies.

The aforementioned Directives have also forced EC member states to ensure good chemical and ecological groundwater conditions.

In the frame of EU.WATER, a set of indices was developed in order to classify the vulnerability of agricultural land to water and nitrogen losses, setting a basis for the integrated water resources management in agricultural systems.

An important advantage derived by the utilization of the indices is that they are comparable for different regions and they can assess the pollution potential not only for groundwater but also for surface waters.

Furthermore, the relative transit time is a measure of groundwater vulnerability.

The less the transit time, the greater the chances of the pollutant to be transported to the groundwater surface (high vulnerability).



Focus article



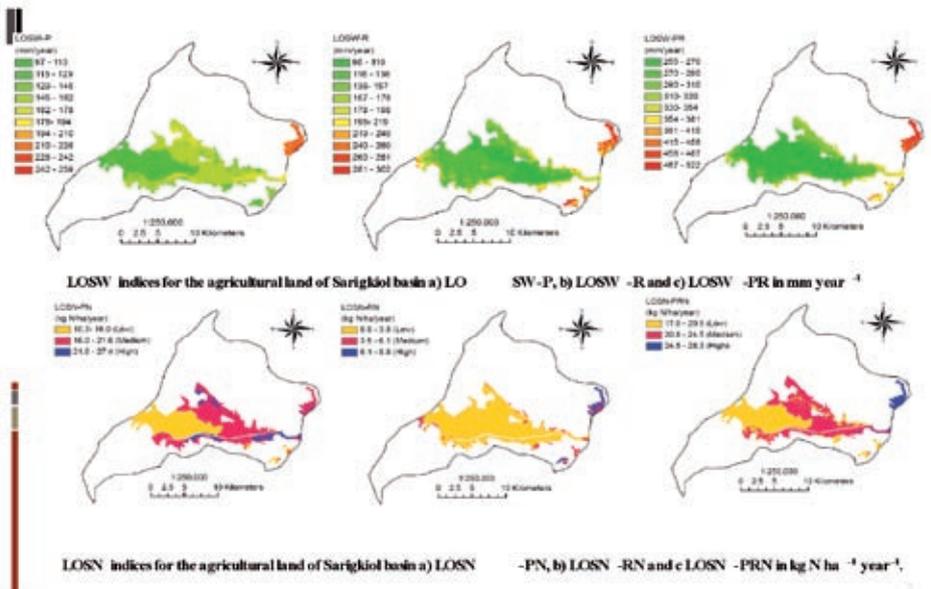
The illustrated maps provide important information, suitable for use by local authorities and decision makers responsible for groundwater resource management and protection zoning.

Vulnerability and sensitivity maps could be used for planning, policy, management and contamination assessment. The higher the water losses, the greater the water nitrate pollution risk and aquifer vulnerability, thus in this area, application of code for good agricultural practice, in order to reduce the groundwater pollution from nitrates.

The proposed reduction will be achieved by the effectiveness increase in fertilisation application, the application of alternative irrigation techniques, the optimization of crop selection as a function of soil characteristics and financial incentives etc. Training courses should be organized in order to educate people in using methods to optimize water and fertilizer use.

Aristotle University
Project Team

All EU.WATER vulnerability maps are available on the project database at: <http://www.eu-water.eu> (section: project pilot areas – GIS maps)



EU.WATER
international
activities



Study visit at the pilot farm in Rovigo

Third Scientific Forum in Budapest

The 3rd Scientific and Technical Partnership Forum (STF) was organized by the University of Debrecen in Budapest on 20-21 October 2010. The topics of the meeting included the state of the art of the capitalization and sensitive areas maps and the completion of common standards to upgrade existing maps addressed to highlight water sensitive and vulnerability zones in agriculture proposed by Aristotle University of Thessaloniki. The meeting also structured the roadmap for the development of the transnational strategy for integrated water management in agriculture proposed by the Lead Partner and the Region of Western Macedonia. Special guests were Mrs. Alessandra Pala from SEE Programme and Mr. Peter Kovacs, Head of Department, Ministry for Environment and Water Management who presented the Water Resource Management in Hungary.



Fourth Scientific Forum in Rovigo

The Province of Rovigo, Italian partner of EU.WATER, organized the 4th Scientific and Technical Forum in Rovigo on 19th and 20th May 2010. After the opening speech of the Councillor of Economic Activities, the team focused on the presentation of the final results of the vulnerability maps to nitrates in the pilot areas and discussed over the Transnational Strategy for Integrated Water Management in Agriculture. An outstanding part of the meeting was devoted to the study visit to the Rovigo's pilot actions site, during which the project partners were taught about the field demonstration of driven barrel equipped with cultivators with straight tines that allows side-dress cattle slurry between corn rows.



EU.WATER
Horizons



Serbia towards EU. Mainstreaming actions to address eco-friendly agricultural practices in line with EU standards

Between December 2010 and February 2011 the Institute for Agricultural Economics of Beograd, in cooperation with the institute “Tamiš” from Pancevo, organized the first cycle of trainings in Pancevo City and in 12 local communities belonging to the Serbian pilot area actually under investigation in EU.WATER project.

The great success of the initiatives is witnessed by the extremely high number of participants, around 180! The trainings were addressed to agricultural technicians to transfer managerial know-how and practices defined by EU.WATER methodologies and techniques experienced through the pilot actions implementation.

The aim is to give inputs to local experts to address upgraded reforms and agricultural processes to improve the whole rural governance in the project areas.

Education topics were: aims of EU.WATER project from aspects of soil and water resources in Southeast Banat Region on the territory of Pancevo city; the implementation of the results of the analysis of soil and water through the application of principles and standards in accordance with the Nitrate Directive 91/676/EEC (Directive 91/271) and Water Directive 2000/60, standards prescribed by the European Union; investigation over the needs for implementing system of monitoring quality of soil and water. Teachers from IAE, Belgrade were Vladana Hamovic Ph.D. Project coordinator (Vice Director of IAE) and Predrag Vukovic M.A. Research Associate, Assistant Coordinator.

From Institute “Tamiš” teacher was Director Mileta Stankovic. Invitations for course participants were by phone and e-mail according to associations of agricultural producers and officials who collaborate with IAE, Belgrade at project.



Knowledge fertilization



Transnational capacity building on water monitoring in Ferrara

From 11th to 18th July the Province of Ferrara organized an intensive transnational capacity building seminar to reinforce the general capacities of administrations and technicians from Serbia, Croatia, Moldova and Ukraine in water and environmental monitoring procedures, with the final aim of better addressing local and regional policy planning for agricultural and water-related issues.

For each participating partner, there was an initial evaluation by a team of Ferrara's experts about the state of achievement of the EU.WATER results obtained so far, according to the criticalities registered. Then, the capacity building and training focused on those critical aspects identified in the use of GIS mapping technology, sampling of aquifers and surface water (on-the-field training was carried out in the Ferrara pilot test rural area) and – finally - chemical and LAB analysis on the main nitrogen analytes with particular reference to the necessary equipment.

The educational package was coordinated by CFR (Ferrara Research Centre), a spin-off the University of Ferrara that counts on one of the most experienced team in Europe in the field of water-quality monitoring and nitrate analysis.

Actually, some experts from the team are visiting the partners' countries to get a wider knowledge on the traditional codes of agricultural practices applied in every pilot areas to strengthen the scientific consistency of the Transnational Strategy for the Integrated Water Management in agriculture.

A video documentary on the transnational capacity building is now available on the EU.WATER website and on YOUTUBE!



Province of Rovigo's broader awareness campaign



Rovigo's pilot actions is recording an increasing interest from stakeholders even beyond the administrative boundaries.

On May 2011 the Province of Rovigo presented in Mogliano Veneto (Treviso Province) at Diana Farm (Veneto Region estate) the results of the pilot action developed in the frame of EU.WATER project.

The field demonstration of driven barrel equipped with cultivators with straight tines allows sidedress cattle slurry between corn rows.

This activity took place during the 2nd "Field Day" of the project "Riducareflui" (reduction of pollution load from livestock waste generated in the drainage basin of Venice lagoon), an initiative sponsored by Veneto Region.

The driven barrel equipped with cultivators with straight tines has been connected to a 120 Horse power tractor and has shown its capability to apply cattle slurry between corn rows; several field demonstrations have been conducted to show how easily the slurry is injected at about 15 centimetres below surface without damaging corn plants.

The demonstration has generated considerable interest among the 300 participants (farmers, agricultural equipment producers, agronomists involved in technical assistance to farms, agronomy professors of Agricultural Science of Padua University, agricultural managers and employs of Veneto Region), since it is the only appliance that inject slurry, and Rovigo Province recorded the request of Padua University to test it.

Province of Rovigo
Project Team



Who are the EU.WATER partners?



Presentation of the project team of Greece

EU.WATER involves 2 partners from the North part of Greece: The Aristotle University of Thessaloniki and the Region of Western Macedonia, e.g. an academic partner and a local national Authority.

Aristotle University of Thessaloniki (AUTH) was founded in 1925 and it's currently the largest University of Greece. AUTH has implemented 4.500 projects in the last 12 years where more than 10.000 staff members and external co-operators have participated. Within the framework of these projects, there has been extensive cooperation with Universities, research centers and other bodies in Greece and Europe, as well as in other countries outside Europe. The School of Agriculture was established within the University campus in the centre of the city. Some school laboratories, lectures and practical training are hold in the University Farm, fourteen kilometers south-east from the University campus. The Department of Agricultural Economics is one of the 7 departments of the School. The working team of AUTH in the EU.WATER project is Dr Basil Manos, Dr Thomas Bournaris, Dr Kostantinos Voudouris , Mr. Neratzis Kazakis, Mr. Aristotelis Tagarakis, Mrs. Olympia Papadopoulou and Mrs. Despoina Zioga. The Region of Western Macedonia (RWM) has been re-structured and empowered recently following the Kallikratis Programme of the Greek government. RWM now involves permanent staff, e.g. administrative, engineers, geologists, economists, environmentalists, regional developers, chemists, journalists, technicians etc. RWM is organized in departments; the Water Department deals with the management of the local water resources, the development of strategic plans and the application of the EU Water Framework Directive. The goal is to implement an Integrated Water Management in the local agriculture. The working team of RWM in the EU.WATER project is Mr. Stavros Sapalidis, Mrs. Amalia Piperidou, Mr. Vassilis Gkoutzios and Mr. Efstratios Arampatzis.



Province of Ferrara, Italy



Province of Rovigo, Italy



Trans-Tiszanian Inspectorate for Environment, Nature and Water, Hungary



University of Debrecen for Environmental Management and Policy, Hungary



Region of Western Macedonia, Greece



Aristotle University of Thessaloniki, Greece



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