

SIRRIMED Newsletter nº 4

03/04/2013



### Lancaster Meeting

During the days 20th and 21st June 2012, the Fourth Steering Committee Meeting of SIRRIMED project was held in Lancaster (United Kingdom), to discuss recent progresses and advances in water conservation practices, techniques and policies selected for evaluation through different SIRRIMED work packages.

#### SIRRIMED EVENTS

Depending on their particular cropping calendar, participants were able to present and discuss additional data obtained since the previous SIRRIMED project meeting in Agadir (November 2011).

Particularly, attention had been called on the WPs interlinks and on how to foster the partner's efforts to implement as soon as possible the SED Database. To start the benchmarking analysis it's crucial that the SIRRIMED data from the WP1 and WP2 field experiments, as well as historical data collected locally, is entered into the project's database, both Excel standalone DB (SED) and the web-based one (WAD).

At farm scale, experimental trials have recorded different rates of water savings ranging from 5 up to 50% of the required irrigation needs without significantly altering the historical yielding rates of different crops (citrus, peaches, tomatoes, potatoes, olives, grapes, wheat, etc.). The wide variation in water saving rates is due to the current intrinsic attributes of each production system (soil, plant and atmosphere), to the irrigation infrastructure and to the irrigation scheduling and water management strategies implied for each case study. These trials are being repeated to confirm results and practical guide per crop is foreseen to be developed by the end of the project (late 2013 – early 2014).

At district and watershed scales, different data sets and models have been assembled together into a decision information system "DIS" of which the alpha version has been made operational and distributed for testing and evaluation. The DIS is an operational algorithm to retrieve crop evapotranspiration (ET) from remote sensing data and coupling and analysis with generic crop model and hydraulic model to help water-stakeholders taking the appropriate strategic and operational decision.

Collected data at farm and district levels have been treated and structured, and are progressively uploaded into a standard web-based database. Furthermore, a benchmarking tool has been developed and is currently in use for different partners to carry out the corresponding analysis in various study areas of the Mediterranean region.

The next SGM is foreseen to be hold during May 2013 in Madrid.

SIRRIMED Newsletter n° 4

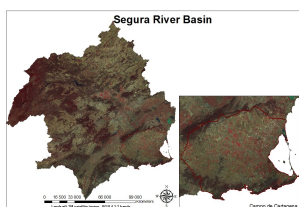
03/04/2013



## SAPIAMA receives an award for its participation in European projects

Our partner Ms Laila Khouimi, as SAPIAMA representative, received May 30, 2012 the prize for the best Moroccan participation in projects of the 6th and 7th Framework Programme, in the category "Innovation and Valuation" for his participation in IRRIVAL and SIRRIMED, two projects studying the efficient use of water resources in agriculture in the Mediterranean region.

The prize, awarded by the Department of Technology of the Moroccan Ministry of Higher Education, Scientific Research and Professional Training, was presented at a ceremony in Rabat CNRST during the final conference of the M2ERA project. The conference showcased other pilot projects and introduced new EU guidelines for funding research and innovation in the context of Horizon 2020 programme (2014-2020).



## Segura basin

One of the pilot-basins studied in SIRRIMED is the Segura River Basin (SRB, Spain), located in the southeastern part of the Iberian Peninsula. SIRRIMED focuses on the area with the most important irrigation scheme of the Murcia Region, called Campo de Cartagena (see picture).

The SRB, with an area of 18,870 km<sup>2</sup> has the lowest percentage of renewable water resources of all Spanish basins and is highly regulated.

The main water demand comes from agriculture, covering more than 43% of the basin surface (SRBP, 1998), of which one-third is brought under irrigation (269,000 ha). It should be emphasized that agricultural water demand from irrigated areas of the SRB accounts for 85% of the total water demand in 2007 in the entire basin.

Water scarcity is a major issue in the Segura River Basin. Available water resources per inhabitant in the Segura River Basin (only 442 m<sup>3</sup>/inhabitant/year) are much lower than the national water scarcity threshold, which is set at 1000 m<sup>3</sup>/inhabitant/year, according to United Nations and the World Health Organization. The difference between water supply and demand is high. Consequently, an important water transfer from the northern Tagus River Basin together with desalinization are considered the most attractive options to increase water availability in the basin.

The SRB was selected as the Spanish pilot river basin by the European Group of Experts for Water Scarcity and Drought (WS&D), an initiative that followed on the Common Implementation Strategy (CIS) created for the European Water Framework Directive (WFD, 2000). This selection followed on the work done for the technical document Drought Management Report, including Agricultural, Drought Indicators and Climate Change Aspects (DMP Report, 2007).

## SIRRIMED TARGET AREAS

SIRRIMED Newsletter n° 4

03/04/2013

## Intelligent Reclaim Irrigation System (IRIS)



### PROJECTS RELATED TO SIRRIMED

Intelligent Reclaim Irrigation System (IRIS) is a Eurostars project which counts with the participation of CEBAS, the lead partner of SIRRIMED. During three years starting from October 2011, its objective will be to develop a water treatment system which reclaims water and utilizes nutrients from municipal wastewater for irrigation purposes. The system will treat domestic wastewater from small villages. It will connect waste to food production with modern technology.

The project will be developed in four phases:

1. Development of the purification technology which reclaims water containing nutrients and CO<sub>2</sub> from biogas.
2. Development of sensor control system to control the minerals and pollutants.
3. Development of the irrigation technology / greenhouse technology in relation to crop results.
4. Assessment of food safety and HACCP standards.

SIRRIMED Newsletter n° 4

03/04/2013



EUROPEAN NEWS

## European Innovation Partnership on Water (EIP WATER)

The 18 December 2012, the second meeting of the EIP Steering Group in Brussels adopted the Strategic Implementation Plan for the EIP Water. This marks the beginning of an operational phase of the organism.

<http://ec.europa.eu/environment/water/innovationpartnership/pdf/sip.pdf>

A first coordinated action has been proposed: a German-Romanian partnership focusing on a Modular Sustainable Plant for Wastewater Treatment that is committed to operate in line with the principles of an Action Group.

[http://ec.europa.eu/environment/water/innovationpartnership/action\\_groups.htm](http://ec.europa.eu/environment/water/innovationpartnership/action_groups.htm)

A call for expressions of Commitment for Action Groups has also opened. They will work on actions laid out in the Strategic Implementation Plan.

[http://ec.europa.eu/environment/water/innovationpartnership/pdf/Call\\_expression\\_commitments.pdf](http://ec.europa.eu/environment/water/innovationpartnership/pdf/Call_expression_commitments.pdf)

Also, a survey is available to stakeholders. Its purpose is to provide information for the development of an online marketplace for the EIP Water. This website will be a tool to facilitate communication and collaboration, while offering a meeting point between suppliers and stakeholders interested on innovation in water across Europe. The survey will be open until 18 January.

<http://www.semantic-web.at/eip-survey/>

For more information on the "Water Innovation Partnership", visit the following link.

SIRRIMED Newsletter n° 4

03/04/2013



## Eco-innovation initiative

The Eco-innovation initiative, which forms part of the EU's Competitiveness and Innovation Framework Programme (CIP), bridges the gap between research and the market. It helps good ideas for innovative products, services and processes that protect the environment become fully-fledged commercial prospects, ready for use by business and industry.

### NEW CALL OF PROPOSALS

Eco-innovation is about reducing our environmental impact and making better use of resources. This means developing products, techniques, services and processes that reduce CO2 emissions, use resources efficiently, promote recycling and so on. There are five main strands to this initiative:

- Materials recycling and recycling processes.
- Sustainable building products.
- Food and drink sector.
- Water efficiency, treatment and distribution.
- Greening business.

The EU is looking to maximise the impact of Eco-innovation and make every euro go as far as possible. The best Eco-innovation projects are those that can be replicated across the EU. Eco-innovation projects are not research projects. The ideas must be developed, feasible and also viable in the long-term to qualify for funding.

This funding is made available in form of grants. Information on the specific types of actions covered by the calls for proposals is available on the web page on the calls' main themes.

More information on the programme in the link below.