

Mediterranean Science, Policy, Research & Innovation Gateway

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The Mediterranean Science, Policy, Research and Innovation Gateway (MED-SPRING) is a Coordination Action financed by the INCO-Net instrument under the FP7 - Capacities Programme. The aim of the Project is to contribute to the quality of the Euro-Mediterranean research area, with a particular focus on the bi-regional Euro-Mediterranean S&T cooperation, research and innovation, policy dialogue and cooperation monitoring.

Welcome to the 13th MED-SPRING E-Newsletter!

Dear readers, welcome to the thirteenth issue of the MED-SPRING E-Newsletter, which has the purpose of informing about our activities and involving researchers, stakeholders, policy makers and governmental officers in a renewed strategy for the Euro-Mediterranean partnership, with a particular focus on the Euro-Mediterranean Science and Technology Cooperation.

KEEP AN EYE ON: **AGORA MED-SPRING**

Our recent activities

- **Science Café on Climate Change**

According to the agreements of the 2016 MED-SPRING project Annual Meeting in Tunis, and within the framework of the 5th international symposium on “Environment and Sustainable Development”, the Ministry of Higher Education, Scientific Research and Executive Training (MESRSFC) of Morocco organized a Science Café to discuss about Climate Change, on scientific and societal challenges. The event was held on Monday 10 October 2016 at the “Faculty of Sciences” in Rabat.

- **Second training and capacity building on Innovation Systems**

MED-SPRING organized its “2nd Training on Innovation”, hosted by the German Aerospace Centre (DLR) in Bonn, Germany, from 20 to 22 September 2016. Overall, this was the sixth and last workshop on Capacity Building of the MED-SPRING project.

- **MED-SPRING 1st Euro-MedHackathon: Eco-Efficiency in the Agro-Food Chain**

The “1st Euro-Med Hackathon: Eco-Efficiency in the Agro-Food Chain” took place in Amman (Jordan) from 14th to 15th December 2016. The 2-day event was organized by MedSpring and STRD-II projects and was hosted by HCST, in collaboration with STRD-II programme, MHE-SR, and CIHEAM-IAMB.

Also in the pipeline!

- **Global Forum for Food and Agriculture**

The Global Forum for Food and Agriculture (GFFA) is an international conference that focuses on central questions concerning the future of the global agri-food industry. It gives representatives from the worlds of politics, business, science and civil society an opportunity to share ideas and enhance understanding on a selected topic of current agricultural policy. The GFFA 2017 was held on the subject “Agriculture and Water - Key to Feeding the World” in Berlin from 19 to 21 January 2017.



- **5TOI_4EWAS Innovation Week**

The first 5TOI_4EWAS Innovation Week took place in Casablanca from 23 to 26 January 2017 at the Hotel Idou Anfa, Casablanca - Morocco. The Euro-Mediterranean innovators, researchers, policy makers, international companies and investors were very welcome. This week was organized in several tracks to offer a wide range of opportunities as well as to bring together ideas, knowledge and people from the energy, water and food sectors. The idea is to refine and to address the future trends on R&I policies.

- **Water-Energy Nexus: Resource Efficiency - Capacity Building Workshop for ESCWA Region**

The UN Economic and Social Commission for Western Asia (ESCWA) Beirut, Lebanon, in cooperation with the National Oil and Gas Authority in Bahrain under the patronage of the Minister of Oil, organized a regional capacity-building workshop on “Water-Energy Nexus: Resource Efficiency”. The event was held under the auspices

of the Minister of Oil in Bahrain, on 19-20 February 2017. The workshop was followed by a regional workshop on Carbon Capture, Use and Storage (CCUS) on 21 February.



- **FAO Presents NENA Water Scarcity Initiative**

At a technical briefing on the water-food nexus held at UN Headquarters in New York, US, the Food and Agriculture Organization of the UN (FAO) presented the FAO-NENA (Near East and North Africa) Water Scarcity Initiative. The Initiative provides a comprehensive framework to ensure the sustainable use and preservation of scarce water resources in the region. The FAO Regional Water Scarcity Initiative was formulated in response to a request of the FAO NENA Regional Conference, which identified the issue as a central priority for Member States.

- **Annual Conference of the Arab-Euro Organization for Environment, Water and Desert Research**

The website of the annual conference of the Arab-Euro Organization for Environment, Water and Desert Researches has been created. The conference will be held in Aqba, Jordan, next April 3-6, 2017.



Meet our Partners! The Scientific and Technological Research Council of Turkey (TUBITAK)

The Scientific and Technological Research Council of Turkey (TUBITAK) is the leading agency for management, funding and conduct of research in Turkey. It was established in 1963 with a mission to advance science and technology, conduct research and support Turkish researchers. The Council is an autonomous institution and is governed

by a Scientific Board whose members are selected from prominent scholars from universities, industry and research institutions.



TUBITAK is responsible for promoting, developing, organizing, conducting and coordinating research and development in line with national targets and priorities.

TUBITAK acts as an advisory agency to the Turkish Government on science and research issues, and is the secretariat of the Supreme Council for Science and Technology (SCST), the highest S&T policy making body in Turkey.

Setting its vision as to be an innovative, guiding, participating and cooperating institution in the fields of science and technology, which serves for improvement of the life standards of our society and sustainable development of our country, TAJBAYTAK not only supports innovation, academic and industrial R&D studies but also in line with national priorities develops scientific and technological policies and manages R&D institutes, carrying on research, technology and development studies. Furthermore, TUBITAK funds research projects carried out in universities and other public and private organizations, conducts research on strategic areas, develops support programs for public and private sectors, publishes scientific journals, popular science magazines and books, organizes science and society activities and supports undergraduate and graduate students through scholarships.

More than 1500 researchers work in 15 different research institutes of TUBITAK where contract research as well as targeted and nation-wide research is conducted.

Read more: <https://www.tubitak.gov.tr/en>.

Focus on Water, Energy and Food Nexus in Tunisia

PROF. LATIFA BOUSSELMY, CENTRE FOR WATER RESEARCH AND TECHNOLOGY, TUNISIA

Water, food and energy are three of main priorities in the Med region. Although Tunisia is aware of this issue but little is still done in term of water-energy-food nexus. In this paper we present Tunisian situation focusing on (i) water and its interfaces with food and energy (Nexus from the water sector perspective) as well as (ii) nexus research and innovation priorities.

Water and its interfaces with food and energy

The pressure on Tunisian water resources requires promoting the management of interfaces of water with other sectors in particular agriculture, which uses 75% of developed water but losses up to 50% of applied water. The Ministry of Agriculture, which is in charge of water resources management, might consider the water-food interfaces and pays more attention to the interaction between these two sectors. It is worthy to highlight however that the other water actors pointed out a potential conflict of interest as the Ministry of agriculture manages water while he is the greatest water user.

The inscription of right to water as well as the precepts of good governance and sustainable management of resources in the new Constitution, should drive changes in water sector toward a holistic management approach and participatory and transparent governance, which guarantees various actors involvement. However, the civil society has emphasized the little consideration of these new principles in the drafting of the new Water Code by the Ministry of Agriculture. One of the suggestions is to integrate a regulatory body to regulate the resource considering all sectors (agriculture, energy, industry, residential, etc.) and a workshop was organised with the contribution of the Ministry of Agriculture and the participation of CERTE on 31-1-2017.

It is clear that the current system of water governance in Tunisia, where four different ministries are responsible of the Nexus sectors (i.e., for (1) water and agriculture, (2) environment including wastewater management, (3) energy, (4) health for water quality control), might hinder the integration of the Nexus approach instead of the

sectorial vision. This is observed in the case of wastewater reuse management. Four ministries intervene in the management and reuse is viewed as a strategic priority, however, the reuse rate has not exceeded 30% during last decade.

Actually, if water / energy interface is considered, it will be possible to move towards (i) local management systems, instead of centralized systems, with lower energy consumption for pumping for water transfer and (ii) less energy consumer-oriented treatment systems when appropriate (e.g., nature based technologies) that are considered sustainable and with low cost of operation. This reorientation driven by nexus approach will also serves re-use of water purpose.

At present, a reliable data on fields relative to various interactions between nexus sectors at national scale are limited, but their development is primordial to better understand the inter-linkages between water, energy and food sectors and to elaborate the appropriate models.

Nexus research and innovation priorities

The Med Spring project - Centre for Water Research and Technology (CERTE)- has participated in the National Days of Research and Innovation (JNRI: <http://anprtn.wixsite.co/prioritesnatr-i>) that is organized by the Ministry of Higher Education and Scientific Research and the National Agency for the Promotion of Research (ANPR) on 16-17 December 2016. The JNRI aims to contribute to the identification of the national RI priorities. During these days, the Med Spring-CERTE has participated as rapporteur to identify priorities in field of the water-energy-food nexus.

The consideration of NEXUS topic during these JNRI demonstrates that the WEF Nexus approach has received its merited attention by RI decision makers. Experts and users of the relevant sectors and that have various profiles (i.e., public, private, NGO, etc.) have discussed and agreed, at their level, of main priorities. Participants have stressed the importance of RI as support to adopt nexus approach for water, energy and food securities in a context of scarcity of resources and climate change. In this sense, RI should allow the nexus approach to be the driver for the development of arid regions and marginalized areas. Participants are also aware of the limitation of the national governance system reported in the previous section and are seeking for research for innovative NEXUS governance and funding systems. Other RI aspects for more sustainability offered by nexus interactions are underlined such as renewable energy use and rationalisation of the use of chemicals. In summary, a new nexus oriented RI is needed to address unsustainable patterns.

The identified RI priorities are in line with the EMEG position paper for a Nexus Comprehensive Understanding of Water-Energy-Food and can also be tackled in the frame of EU-Med collaboration in the upcoming H2020 programs.

The Grand Challenges meeting is focusing on research and innovation in the context of global health and development. The Med Spring project - CERTE contributed to the event organised by European Commission on Climate change and urbanization and their impact on health, with a session dedicated to the link between nutrition, health, agriculture and water (October 23-26, 2016). Prof. Bousselmi (CERTE) presented an oral communication entitled "Options of Sustainable Local Water Management at the Urban Level Adapted to North Africa" and highlighted the link between wastewater reuse, agriculture an health and related main RI findings in the frame of EU funded projects as well as the necessary RI topics to be developed for safety integration of treated wastewater reuse.

Colophon: *This E-Newsletter has been developed within the framework of the MED-SPRING Project (FP7-INCO.Net 311780). For further information about the project please visit the official website: <http://www.medspring.eu>. Edited/Written by MED-SPRING WP3 Team and MED-SPRING Coordination team. Images by MED-SPRING, UN, GFFA and EWDR.*