





Mediterranean Science, Policy, Research # Innovation Gateway

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The Mediterranean Science, Policy, Research and Innovation Gateway (MEDSPRING) 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 MEDSPRING!

Welcome to the first edition of Newsletter series of the MED- SPRING project!

This newsletter has the purpose of informing on and involving researchers, students, active citizens, policy makers and governmental officers in a renewed strategy for the Euro-Mediterranean partnership, with a particular focus on the Euro-Mediterranean Science & Technology cooperation. The purpose of this strategy is to improve the quality of the Euro-Mediterranean dialogue, particularly increasing knowledge share, level of coownership and networking among governmental institutions, research organizations, associations and NGOs,

by Claudio Bogliotti, MEDSPRING Coordinator



also involving civil society in the institutional dialogue. The MEDSPRING dialogue addresses three regional societal challenges: energy, high quality affordable food, scarcity of resources. In this quarterly Newsletter you will read about the main progresses made by the project on the dialogue and networking in these thematic areas. Each issue of the newsletter will address one of the three specific societal challenges and, through articles and interviews, will allow also to virtually connect with the main RTD actors of the region. With this Newsletter, we also intend to create a trustful relationship with the reader and we invite you to actively participate with your feedback, comments and contributions in the next issues. To this regards, you will find all the necessary information within this issue.

Would you like to know more about the three MEDSPRING Societal Challenges?

The Euro-Mediterranean Agora is our platform to stimulate participation and discussion of civil society and stakeholders on research and innovation accounting for Water, Food and Energy. We kindly invite you to visit the *Euro-Mediterranean Agora* and also follow us on *Twitter* and *Facebook*.





Our project

The Monitoring Committee for the Euro-Mediterranean cooperation in RTD (Hungary, June 2011) strongly underlined the need of adapting the Euro-Mediterranean research and innovation policies and cooperation to the changing Mediterranean society. MEDSPRING, built on the previous experience of the INCO.NET MIRA, but adapted to the new reality of the Euro-Mediterranean policy and the general orientations defined in the Euro-Mediterranean Conference of Barcelona (2-3 April 2012), is focused on three societal challenges (Energy, High Quality Affordable Food, and Scarcity of resources) and aims at tackling policy objectives by creating a dialogue and coordination platform of governmental institutions, research organisations, associations and civil society.



It also addresses capacity building and analysis of societal challenges to increase respectively research capacity and shared knowledge and cooperation on common areas of interest. It will support synergies and networking to strengthen joint activities and joint cooperation in EU programmes, and monitoring regional RTD cooperation and policies.

Financed by the *7th Framework Programme* of the EC, and involving *28 partners* from all around the Mediterranean, the Mediterranean Science, Policy, Research & Innovation Gateway - MEDSPRING - gathers expert voices including leading scientific communities as well as policy makers and stakeholders, bridging policy and research.



Our activities

• MEDSPRING Kick Off Meeting

When? 4th February 2013 Where? Bari (Italy) What? The 28 MED-SPRING partnering organizations met last February to launch the MED-SPRING project in Bari, Italy, a FP7 initiative based on the dialogue on research and innovation on three key issues for the Euro-Med: Water, Food and Energy.

• 1st Euro-Mediterranean Expert Group (EMEG) Meeting

When? June 2013 Where? Lisbon (Portugal) What? 50 experts from the MPCs and the EU will discuss on how to increase the uptake of water resources, food quality and renewable energies research results, and enhance a positive impact on the civil society. But... what is EMEG? The Euro-Mediterranean Expert Group -EMEG- is a group of high level professionals with different background and experience from EU Members States and Mediterranean Partner Countries. EMEG aims at developing recommendations and suggestions to the European Commission for the development of the future agenda for the Euro-Mediterranean cooperation in Research and Innovation, with emphasis on enhancing research impact, effective policies and adequate holistic and sustainable approach to three main societal challenges in the Mediterranean region: resource efficiency (particularly, water), high quality affordable food, and energy (particularly, renewable energies). Please visit http://www. medspring.eu and http://agora. medspring.eu to know more about EMEG.

 Euro-Mediterranean Inter-Institutional and trainingawareness meeting When? July 2013 Where? El Gouna (Egypt) What? Senior officials and researchers from the MPCs and the EU will discuss on the prospects of Euro-Med Cooperation on Science and Technology for a more stable and sustainable cooperation.

• 1st Meeting of the Euro-Mediterranean Observatories

When? September 2013 Where? Beirut (Lebanon) What? Coordinators of relevant observatories addressing policies and research on water, food and energy will convey to discuss possible ways of collaboration under the prospect of building a common frame of monitoring objectives, indicators and standards.

Also in the pipeline!

• Calls/Programmes

Please visit *FP7 and CIP* to know the latest calls for proposals, and also *HORIZON 2020* to know the last novelties of this programme.

• Aquaknight Project - 1st International Conference

The EU project *AQUAKNIGHT* will hold its 1st International conference "Water Leakage detection solutions in the Mediterranean basin: the AQUAKNIGHT approach" the 15th May 2013 in Alexandria (Egypt).

• Week of Innovative Regions in Europe (WIRE IV)

5-7 June 2013 in Cork (Ireland). The conference will address the Innovation Union context of the 'Capacities' work programme, especially that of the Research Potential Programme, with emphasis on research and innovation as key drivers of competitiveness, jobs, sustainable growth and social progress.

• 4th INCO Conference

17-19 June 2013 in Marseille (France). This conference is being held as a part of "INCONTACT-One World" project which is the official network of the FP7 INCO NCPs.







Meet MEDSPRING Partners and EU-MPC Researchers

MEDSPRING Partner 12: Direction de la Technologie. Ministere de la Education Superior, de la Formation des Cadres et d la Recherche Scientifique (Morocco)

Royaume du Maroc Ministère de l'Education Nationale de l'Enseignement Supéxieur de la Formation des Cadres et de la Recherche Scientifique



المملكة المغربية وزارة التربية الولهنية والتعليم العالس و تكوين الألصر والبحث العلمي مديرية التكنولوجيا

Direction de la Technologie

Former FP7-INCO.Net-MIRA Deputy Coordinator, the Direction of Technology aims at promoting the technological development and innovation in Morocco by implementing different programmes and incentives to encourage the valorization of research result, and also the links between the academic and private sectors. The Direction hosts as well the Moroccan FP7 Information Point and manages a network of 27 Institutional Contacts Points existing in Moroccan Universities, Institutes and Research Centers.

The Direction represents Morocco in the MoCo meetings and participates in different European Initiatives: FP6 and FP7 Projects, such as Euromedanet, MED7, Food-N-Co and Ideal-Ist7fp, Era-Med, Promedaccess or MIRA; and in the ENPI project Jumelage Institutionnel Maroc & France-Espagne Appui au Systeme National de la Recherche au Maroc pour une Integration a lEspace Europeen de la Recherche. The Direction of Technology is managing actually the following European projects: MOBILISE, MEDSPRING, ERANETMED and ARIMNET. More info at: http://www.enssup.gov.ma/. Contact: benbouida@gmail.com.

INTERVIEW: Prof. Dr. Laila Mandi

Brief CV

Prof. Dr. Laila MANDI is full professor of Environmental Sciences at the University Cadi Ayyad, Marrakech (Morocco). Her research Interests are: water management, rational use of water, wastewater treatment, recycling and reuse, water quality. In 2001, she was nominated as a National Co-ordinator of the Pole of competences on "water and Environment" which represents a Moroccan cluster developing research on the topic of "integrated water resources management". In 2007, she was nominated as a Director of the National Centre for Studies and Research on Water and Energy (CNEREE) at the University Cadi Ayyad. She is recognised internationally as expert, evaluator and reviewer in the domain of water and environment. She was involved in several EU and non EU projects. Has published several peer-reviewed scientific papers and book chapters; spoken also at national, international conferences and workshops as lecturer. She was a member of scientific committee of many international conferences and has organised several international events (conferences, workshops, seminars, etc.) on water technologies and environment.

Question: What is your vision of the EU-MPC cooperation in RTDI? In your opinion, which are the new challenges of this cooperation?

Answer: The current EU-MED cooperation in research, technological development and innovation (RTDI) constitutes an important opportunity for the development of the Mediterranean partnerâĂŹs countries. This is foreseen by its contribution to bridge the gap between population & business; promotion of the sustainable development and enhancing the exploitation of the RTD outputs by society and industry especially in southern Mediterranean countries.

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The improvement of this cooperation was enhanced by the creation of the Union for the Mediterranean (UfM) in 2008 of which the institutional instrument RTD monitoring committee (MoCo) is playing an important role to stimulate the Euro-Mediterranean cooperation in the field of Science and Technology and to support the sustainable development of the MPC. This cooperation is also strengthened through the set up of specific platforms within the FP7 program such as the FP7-INCO.Net MIRA project (Mediterranean Innovation and Research Coordination Action) which contributes greatly to reinforce the dialogue between EU and the Med. countries by bringing together policy makers, stakeholders and practitioners in research and innovation to reflect on and analyse innovation support mechanisms within their regional and national context and to identify common interests in research



MIRA project has contributed highly to foster the participation of Mediterranean Partner Countries (MPC) in the EU Seventh Framework Programmes through focused actions like capacity building to increase research capacities, training activities, project writing, clustering, creation of an observatory of EU-MPC cooperation in S&T, etc. Such actions with positive impact should be encouraged and replicated to enhance EU-MED cooperation in the future. However, in spite of the progress obtained by the RTDI current EU-MED cooperation, important challenges still remain in the areas of technological, managerial and policy innovation, human resources development, sharing common knowledge, gathering a new frame and consensus on RTDI at different levels: institutional, economic, social, environmental.

For the future of this cooperation, it becomes necessary to strengthen research and innovation in the Southern Mediterranean region with limited technological and innovative capacities; to make linkages between research outputs and innovations and policy, to coordinate the national policies and programmes of the EU Member States and Southern Mediterranean countries in the area of Research and Innovation; to build competences in the domain of Research and Innovation (governance, human capital and research infrastructures), to increase mobility opportunities for students, researchers and academics and to develop research cooperation based on mutual benefit, equal participation / co-ownership of EU and MPC researchers.

Q: The Euro-Mediterranean Conference on Research and Innovation (held in Barcelona, in April 2012) identified water use efficiency as one of the Euro-Mediterranean critical issues. In your opinion, which are the main challenges set out by the scientific community? Have you perceived an alignment of MPC policies about this issue?

A: I had the opportunity to be one of the members of the Water Panel of the Euro-Mediterranean Conference on Research and Innovation of 2-3 April 2012. Many countries in the Mediterranean region are located in the arid regions of the world that are known to have limited water resources and suffer increasing water scarcity. Sustainable management of these resources will become increasingly complex in the future as climate change is expected to increase the frequency and intensity of drought and water shortages.

So, the use of water in efficient way becomes a challenge in Mediterranean countries. Currently, there is an increasing concern about the effective and efficient use of water for agriculture and water conservation in general. A debate and dialogue on the perspectives for efficient use of water resources in the Mediterranean region was carried out by scientific communities to assess and promote schemes of water saving, optimal water use and water conservation in different sectors (urban, industrial and agricultural). Important savings can be achieved especially in agriculture through a better use of both technical and economical tools, as well as institutional and human resources.







Water saving can also be achieved in both drinking water and industry, but the most beneficial saving in terms of volume would be in irrigated agriculture which consumes more than 80% of the available water resources. MPC governments have made great efforts, and have invested heavily, to improve water resources management through the application of new technologies in urban and agricultural areas. Such investments are intended to reduce water losses and to increase water availability at local levels. However, when watershed is considered, the issues become more complex and need for more integrated approach.

The improvement of strategies for basin management taking into account the technical, economic, social and environmental aspects, the use of sustainable technological solutions for water treatment recycling and reuse, the efficiency and equity

in water policies, developing tools for water quality-quantity monitoring and the improvement of knowledge sharing among practitioners would be the key actions towards a sustainable rational use of water resources.

Q: In your opinion, which is the status of integrated water resources management on the policy agenda of the MPC?

A:Major current and future problems with fresh water resources in the Mediterranean region arise from the pressure to meet the food, agricultural, human settlement and industrial needs of a fast-growing population. Population in South Mediterranean is increasing, as is tourism, leading to growing demands for water resources, dramatic reduction of water yields, exacerbating conflicts, and to a more pollution which also reduces the availability of water to meet human needs. There is no doubt that for the Mediterranean region under water scarcity conditions, the integrated approach to manage limited water resources and to harness solutions outside the traditional water supply approach has to be an essential requirement for the sustainable development.

In the north of the Mediterranean, the EU Water Framework Directive (WFD) provides the main policy framework for water management. The WFD outlines an overall strategy for water management and mentions a number of important aspects. namely: river basin management, whereby water resources are managed in an integrated manner at a catchment level. In the south and east of the Mediterranean, countries are taking steps towards IWRM by developing their own national strategies. Many Mediterranean countries are currently in a stage of institutional reform, orienting priorities and practices towards an integrated water resources management (IWRM) approach that complies with several WFD objectives and addressing the same issues. Many countries are in the process of developing their national IWRM plans while a smaller group of countries are still in the very initial phase of preparation. At the same time, countries should mainstream IWRM consider-



ations, methodologies and practices in the implementation of their investment programmes and application projects at the transboundary, national and local levels. Regardless of the level of progress achieved until now it is important to encourage and assist, as appropriate, all the countries of the region in their processes towards integrated management of water resources. Addressing, in particular, environmental and biodiversity concerns in the process of IWRM planning and implementation is of major importance for achieving sustainable development in the Mediterranean the countries.

The adoption of an integrated approach for water resources management is particularly challenging in the Mediterranean region where sectorial approaches in water management are still prevailing due to: weak policy implementation; weak monitoring and assessment at the national and local level; fragmentation of responsibilities between authorities; limited technical, management and enforcement capabilities to address water resource issues; lack of effective operational strategies; and financial constraints including lack of financial resources at affordable





levels.

Q: In your opinion, which will be consequences of climate change impact in the Mediterranean? In which way water policies should structure water management actions to mitigate them?



A: The Mediterranean is one of the regions to be affected most by climate change, facing water problems such as scarcity, pollution, conservation, sanitation and management of resources. During this century, climate change may further reduce water availability for global food production, as a result of projected mean changes in temperature and precipitation regimes, as well as due to projected increases in the frequency of extreme events, such as droughts and flooding. Indeed, the recent IPCC Fourth Assessment Report indicates that climate change will have significant impact on crop production and water management systems in coming decades, seriously hindering the irrigated agriculture, which represents the bulk of the demand for water in many countries, and which is also usually the first sector affected by water shortage and increased scarcity, inducing a decreased capacity to maintain per capita food pro-

duction while meeting water needs for domestic, industrial and environmental purposes. Consequences of physical water scarcity are showing up, evoking severe environmental degradation including river desiccation and pollution, declining groundwater and water allocation, raising the problem of conflict between cities, regions and countries. There is a necessity to review the methods of water management and strategies against risks due to climate change to reduce vulnerability, loss and damage on short, medium and long terms in the Mediterranean. Adapt to the impacts of climate change on water resources requires technical adjustments and adaptation policies development.

Q: In your opinion, is there a need of a specific treatment of the role of women in water policies and how?

A:Women have played and continue to play an important role in water provision, water management and water use. For example, in Many Mediterranean countries, women play a key role in the domain of agriculture. Unfortunately this role is many times neglected due to the social and cultural conditions. In the other hand, still very few women are present at the level of decision making process mainly in Mediterranean developing countries (Morocco, Algeria, Tunisia, etc.). Integrated water resources management needs the involvement both of women and men so it becomes necessary and urgently to: take into consideration gender dimension when drawing water policy; increase the visibility of women in the programs related to integrated water resource management; take in consideration the priorities, contributions, needs and constraints of women in water issues and not neglecting the important role they play at local, national and international levels; develop actions and mechanisms to attract more women for water management careers; build the capacities and strengthen the skills of women in water issues mainly in rural areas; and develop research on women and integrated water management.

Dossier: How will International Cooperation Be in H2O2O?



International Cooperation (IC) will continue being tackled as a main topic in the coming European Research and Innovation Framework Programme "Horizon 2020". However, based on the available information, there are many novelties respect to the traditional models to support IC, while the main fact, the opening of the Programme to international participation, is maintained. For instance, the emphasis is put in the co-ownership to support projects of common interest between the EU and the third countries or regions.

Some specific tools, such as the implementation of art 185 of the Treaty, are implicitly suggested, while they keep all the actions "Marie Curie-Sklodowska" open to non-European participants, and favor the sharing use and/or creation of Research Infrastructures of common regional interest. Furthermore, the Societal

Challenge "Europe in a Changing World" - one of the six societal challenges proposed by the Council - deserves special mention, as it faces the need of global and cooperative approaches to the World Challenges.





The latest proposal for a Council decision establishing the Specific Programme implementing H2020, The Framework Programme for Research and Innovation (2014-2020), of December 11th, 2012 (17633/12), underlines that international cooperation with partners in third countries is necessary to address effectively many specific objectives defined in Horizon 2020, in particular those relating to Union external policies and international commitments. This is the case for all the societal challenges addressed by Horizon 2020, which are common in nature.

Where appropriate, Horizon 2020 will promote cooperation at bi-regional or multilateral level, and however, the focus of international cooperation in this programme will be on cooperation with three major country groupings: industrialised and emerging economies; enlargement and neighbourhood countries; and developing countries.

In addition, a range of targeted actions will be implemented taking a strategic approach to international cooperation on the basis of common interest, priorities and mutual benefit and promoting coordination and synergies with Member States activities.

This will include a mechanism for supporting joint calls and the possibility of co funding programmes together with third countries or international organisations. Some of the concrete actions of the Proposal dealing with concrete aspects of IC are:

- Marie Sklodowska-Curie Actions will fund the best or most promising experienced researchers, regardless of their nationality, who want to develop their skills through a trans-national or international mobility experience. Possibilities to restart a research career after a break and to (re)integrate researchers into a longer term research position in Europe, including their country of origin, after a trans-national/international mobility experience will also be supported.
- Research Infrastructures. Horizon 2020 will facilitate the efforts of Member States to optimise their research facilities by supporting an up-to-date EU-wide database on openly accessible research infrastructures in Europe. It will facilitate also the development of global research infrastructures i.e. research infrastructures that require funding and agreements on a global scale. The aim is also to facilitate the cooperation of European research infrastructures with their non-European counterparts, ensuring their global interoperability and reach, and to pursue international agreements on the reciprocal use, openness or co-financing of infrastructures.
- Societal Challenge 6: Europe in a changing world âĂŞ Inclusive, Innovative and Reflective Societies. Horizontal activities will ensure the strategic development of international cooperation across Horizon 2020 and address cross-cutting policy objectives such as developing activities to support bilateral, multilateral and biregional policy dialogues in research and innovation with third countries, regions, international fora and organisations; networking and twinning activities; promote coordination of Union and national cooperation policies and programmes as well as joint actions of Member States and Associated Countries with third countries.

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Colophon This E-Newsletter has been developed within the framework of the MEDSPRING Project (FP7-INCO.Net 311780). For further information about the project please visit the official website www.medspring.eu or contact the Project Info Point at: medspring@iamb.it . Edited/Writen by MEDSPRING WP3 Team, MEDSPRING Coordinator and Prof. Dr. Laila Mandi Images by MEDSPRING, FP6 MELIA Project, European Commission and Pixabay