

Within the objectives of the MEDSPRING Project – *Mediterranean Science, Policy, Research and Innovation Gateway* - 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 & innovation, policy dialogue and cooperation monitoring by creating institutional dialogues and coordination platform of governmental institutions, research organizations, & associations;

The National Council for Scientific Research – Lebanon (CNRS-L) had the pleasure to convene in Beirut, Lebanon on February 17, 2017 a MEDSPRING Science Café and Awareness Raising Event.

The **Science Café** aimed at presenting the state of the art and research in Early Warning Systems, Solar Energy Applications & Marine Research in Lebanon as case studies and best practices for enhanced bi-regional collaborations.

In parallel, an **Awareness Raising Session** aimed at increasing national and regional awareness of on-going efforts and activities to foster Euro-Mediterranean cooperation. In particular, the awareness meeting will present the main frame of:

- 1) Cooperation with the EU (H2020 & Ongoing Projects)
- 2) Implementation of joint programming for Research and Innovation with EU Member States (PRIMA)
- 3) Open discussion and feedback from participants on drawing common objectives for joint programming

The Event was organized in parallel to the ERANETMED Funding Agencies Meeting (February 15, 2017) & the 4PRIMA Stakeholder Event on the Alignment of National Research Programmes (February 16, 2017). Participants from both events were welcomed and encouraged to attend the MEDSPRING Event.

Stakeholders:

Approximately 40 participants (national and regional stakeholders) joined the events, representing national Lebanese public bodies, research centers, and universities. Participants (project partners and stakeholders) from Cyprus, Egypt, France, Greece, Italy, & Jordan - attending the parallel events - also joined the sessions.

Opening Session

Ghaleb Faour, Director of the CNRS-L Remote Sensing Centre (RSC), welcomed participants to the CNRS-L and to the Event. He focused on the work of the CNRS-L and the RSC, stressing the importance of national, regional and international collaborations through EU, World Bank and Joint Lebanese-French & Lebanese-Italian Projects & Programmes. G. Faour, highlighted the main research programme of the RSC, working on increasing ability to forecast and mitigate natural disasters; working to produce and convey quality information to decision makers and stakeholders.

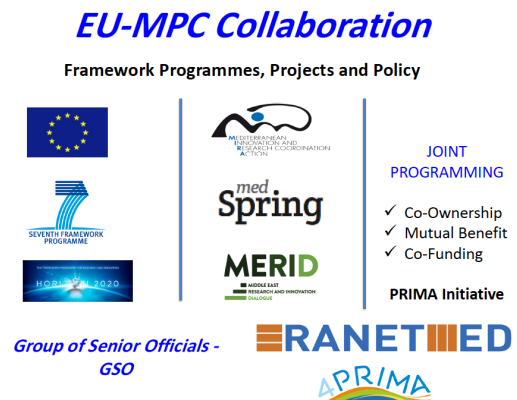
*“One of the main research program in the National Center for Remote Sensing is the Early Warning System known as the “**Sustainable Natural Resources Management Platform and Early Warning System (SuNaR)**”. This system Strengthens the capacities to monitor and forecast hazards for Disaster Risk Reduction, and properly assists both emergency operations while implementing proper prevention and preparedness actions with the usage of **high quality information produced and properly conveyed to decision makers and stakeholders.**”*

Claudio Bogliotti, MEDSPRING Project Coordinator (IAM-Bari, CIHEAM); in turn welcomed participants and introduced the MEDSPRING Project, highlighting it as an FP7 support action within the main thematic of water, Food and Energy. His presentation highlighted the MEDSPRING as a **platform** for communication, visibility and linking with stakeholders and civil society; focusing on the main project initiatives of:

- **The MEDSPRING Agora:** a permanent dialogue platform utilizing social media for strengthening and structuring the participation of civil society. (www.agora.medspring.eu)
- **EMEG (Euro-Mediterranean Expert Group):** a thematic think-tank of more than 45 experts (NEXUS)
- **Supporting Long-Term Cooperation:** linking and synergizing with other Euro-Mediterranean initiatives (ERANETs, Article185, JPIs)
- **Inter-Institutional, Stakeholders & Policy Level Dialogue:** supporting exchange and dialogue on research cooperation across various actors, including EU regions.
- **Capacity Building & Brokerage:** training for trainers, demand-based capacity building and interactive brokerage events on innovation and H2020.

C. Bogliotti also focused on brokerage initiatives held within the project (Cairo, 2014; Berlin; 2015 and Bari; 2016) that facilitate the link between research and innovation through creation of private-public partnerships, mobilizing entrepreneurs from both sides of the Mediterranean, encouraging clustering for innovation and increasing opportunities for establishing contacts through a platform that develops cross-regional research, technological and commercial partnerships.

Rula Atweh, CNRS-L Programme Officer/International Cooperation in turn highlighted the framework of EU-Med collaborations (Framework Programmes, Projects, Joint Programming and Policy (Group of Senior Officials) stressing the developments since the EURO-Mediterranean Conference on Research and Innovation (Barcelona, 2012); which underlined the importance of a renewed partnership, looking into a more substantial prospect for joint programming based on the principle of co-ownership, mutual benefit and co-funding- through joint calls of the ERANETMED, and the PRIMA Initiative and related 4PRIMA Project laying the foundation for a 10 year EU-MED Collaboration in Water and Food Systems.



Science Café

The **Science Café** part the programme, saw three presentations and one documentary screening on the state of the art and research in Early Warning Systems (Flood and Earthquakes), Solar Energy Applications & Marine Research in Lebanon. Participants and stakeholders noted the high quality research in the highlighted projects and programmes, their research and application, and noted important opportunities for collaborations through both bi-lateral and bi-regional (EU-MED) Programmes (ERANETMED Calls and PRIMA).

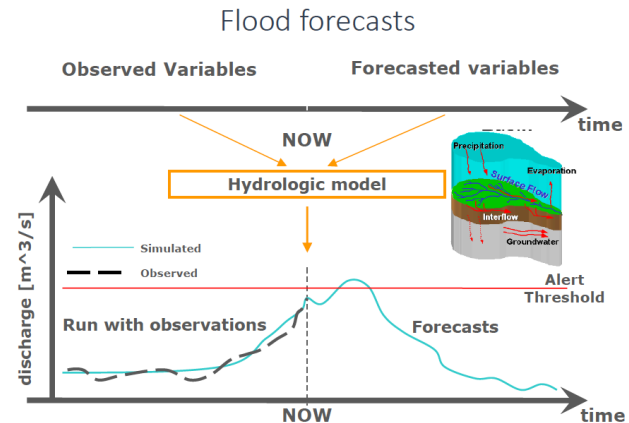
Early Warning Systems (Flood and Earthquakes)

Chadi Abdallah, Researcher at the CNRS-L RSC stressed the increase of natural flood risks in the last centuries, exasperated by uncontrolled urbanization and insufficiency and inefficiency of urban planning over the last two decades. To reduce disasters, international institutional frameworks are being strengthened all over the world to cover, through Early Warning Systems: (1) Preparedness, (2) Awareness; (3) Response; (4) Recovery and (5) Mitigation of natural disasters.

C. Abdallah introduced the SuNaR: Sustainable Natural Resources Management Platform and Early Warning System of the CNRS-L (and in support of the Disaster Risk Management Unit at the Prime Minister Office). The SuNaR Platform functions as an Expert Centre of Researchers, Scientific Experts, stakeholders and ministries and benefits of national, regional and international collaborations among Partner Labs (NASA, CESBIO, ESACIMA, MdT, OLife...) and Bilateral and International collaborations and funding (UNDP, Global Environment Facility, the World Bank, the European Commission and German development agency - GIZ...).

The project main output is a GIS Mapping of Flood Zone Areas with a Risk Assessment on: residential and non-residential structures, agricultural areas and farms, and refugee tents with a frequency of 10, 50 and 100 years.

In parallel, a Continuum model, building on the above and calibrated with historical events, and data acquisition (rainfall, temperature, humidity, wind, radiation, soil discharge data, & spatial data, ...) along with satellite observation system allows in the simulation of the main hydrological processes for deterministic and probabilistic hydrological forecasts to improve operational flood mitigation.



Marlene Brax, Director of the CNRS-L Geophysics Centre; following a brief introduction explaining where Lebanon is situated in the world tectonic map, what are the seismic faults that cross the country and how these faults had historically generated destructive earthquakes, M. Brax, highlighted in her presentation the earthquake early warning EEW basics. How the EEW uses the speed difference between the fast P-wave and the slower S-waves to send an advance warning of the arrival of strong waves to people, schools, homes and offices.

M. Brax explained the technical limitations of the EWS and insisted on the necessity to having a dense network of seismic and geodetic stations with robust communications. Then, she presented the current status of the Lebanese seismological network and the on-going installation of GPS permanent stations. The objective is to reach 30 seismological stations in order to cover all the Lebanese territory.

The National Center for Geophysical Research is also a member in the North-eastern Atlantic, the Mediterranean and connected seas Tsunami early warning System (NEAMTWS). A pilot project consisting of testing a new inexpensive mareograph device developed by the Joint Research Center (JRC) of the European Commission (EC) is being organized and devices are being offered for testing to interested member states/institutions that participate in NEAMTWS. Lebanon through the Geophysical Center has applied and received one device that is currently installed in Batroun in the north of Lebanon.

Solar Energy Application

Sara Najem, Researcher at the CNRS-L RSC; highlighted a recent project on Solar Energy Applications. In Lebanon, a country, which imports 95% of its energy, needs, with only 5% produced nationally; an energy crisis manifests itself in electricity rationing (3 hours in Beirut and up to 8 Hours in other parts of the country). The Solar Energy Application makes it possible to estimate solar energy towards Lebanon's Commitments for 12% -15% of energy being produced from renewables by 2020 (Copenhagen, 2009 & COP 21 Conference, 2015). S. Najem highlighted that regionally, Beirut is the 1st city to be mapped for solar energy estimates through a Decision Support System application designed for the CNRS-L RSC (part of an ENPI CBC MED Collaborative Project: LOCAL-SATS on "Improving the local governance

processes through exchange of good practices, pilots and training in geospatial technologies” which built on EU-MED Collaborations between: Cyprus, Tunisia, Greece, Malta, Spain, Egypt, Jordan, Lebanon and Palestine).

Results of the study indicate:

- A significant generation potential of solar energy for Lebanon
- Financial benefits/savings of solar energy use
- And reduced CO2 emission

The Study is currently being drafted as a policy paper (a collaboration between the CNRS-L RSC and the Energy Policy Programme of the Issam Fares Institute). In parallel an investigation to model Beirut energy hourly consumption is also underway.

CANA-CNRS Research Vessel and Marine Research in Lebanon

“CANA” **Documentary: *Li Bahr Lubnan (For the Lebanese Sea)***: The CANA documentary titled, *Li Bahr Lubnan (For the Lebanese Sea)*, is a unique visual opportunity to delve into the daily scientific work of the vessel in Marine & Coastal Research, while also framing the achievements of the project within the broader context of collaborations and partnerships.

The documentary’s 20-minute storyline focuses on six main components, mainly:

- CANA-CNRS vessel history: From Italy to Lebanon;
- “CANA” as a scientific tool: research tasks and equipment - bathymetry, biodiversity, hydrobiology, pollution, cetacean and fisheries, submarine freshwater springs, and maritime archeology;
- Capacity building and human resources development;
- Services to the community;
- Collaborations and visibility; and
- Perspectives and sustainability.

The innovative and state of the art research, projects and studies presented above; highlight key areas for enhancing EU-MED Collaborations. With most projects initiated and supported by networks and collaborations both bi-regional (with the EU) and international; the projects strongly support enhanced collaborations within renewed partnerships across the Mediterranean.

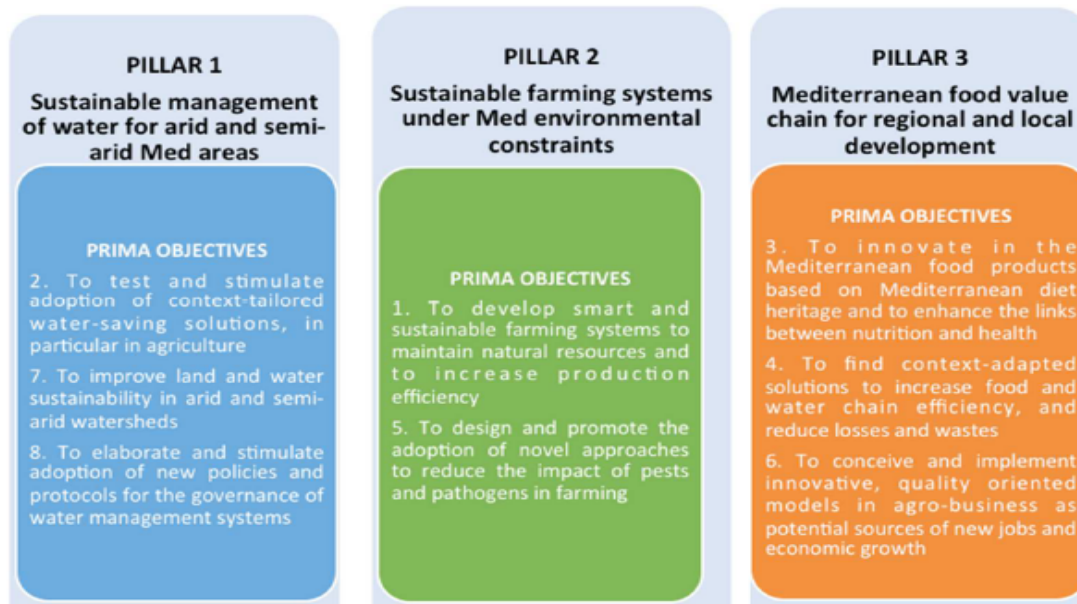
**Awareness Raising Event
H2020 Programmes and Joint Programming**

PRIMA (Morning Session)

Through the presentation of **Maria Uccellatore, MIUR – Italy**; an introduction to the PRIMA Initiative was presented to stakeholders, focusing on PRIMA as the most ambitious programme that will be undertaken by both sides of the Mediterranean for joint programming and integration at scientific, management and financial levels for a period of 10 years.

“The Mediterranean Area is united by both common challenges and common opportunities for the sustainable production and provision of adequate quality and quantity of food and water for enhancing socio-economic conditions, wellbeing and health of its peoples within a reinforced EU-MED Cooperation.”

PRIMA Operational Objectives: Grouped in 3 Pillars



Specific Objectives:

- To **enhance** knowledge and unlock its innovation potential for food security and water availability
- To **advance** existing knowledge and innovation for water and food quality and safety

National Research funding opportunities and collaborative research opportunities within the H2020 Framework Programme

Elise Noujem, Director of the CNRS-L Grant Research Programme (GRP) highlighted opportunities of CNRS-L National Research Funding, designed to support research projects fully or partially from various institutions in Lebanon (universities, national research institutions, or in the CNRS research centers) in all fields of knowledge, in line with the priorities defined yearly in the call. E. Noujem also highlighted a new joint programme for Grant Research Funding with 4 universities in Lebanon; the Lebanese University (LU), the American University of Beirut (AUB), the Université Saint Esprit de Kaslik (USEK) and the Université Saint Joseph (USJ); which allows for joint identification of priorities (2017-2018) and joint funding between universities and the CNRS-L.

In parallel, bi-lateral funding opportunities with the CNR-Italy and the Agence Universitaire de la Francophonie (AUF-France) allows for joint research projects to be conducted among bi-lateral research teams

Joint Programme between the CNRS-L and the CNR-Italy



- Aims at enhancing and strengthening cooperation, mobility and exchange of knowledge between Lebanese and Italian researchers.
- Joint calls for proposals are launched yearly, particularly in the fields of: **Marine Sciences & Biodiversity, Management of Natural Resources, Renewable Energy, Food Security, Archeology, and Water.**
- **5,000 € to the Lebanese team** & to 5,000 € to the Italian team per year (2 Years).
- To date, there has been three successful calls for proposals, and a total of 15 Projects funded .
- **Launching of the 5th Call: May**

Joint Programme between the CNRS-L and AUF



- CNRS-L and AUF (Agence Universitaire de la Francophonie) are launching for the first time a joint call for proposals
- It aims at:
 - Strengthening of the scientific knowledge of Lebanese and Middle Eastern universities.
 - Developing scientific cooperation between universities
 - Supporting young researchers
 - Supporting the transfer of skills
 - Supporting the production and dissemination of knowledge in the Middle East
- Each project should be composed of three universities at least:
 - The project leader must be a Lebanese institution member of the AUF
 - The partner institutions must be members of the AUF but from 2 different regions that have diplomatic relations with Lebanon
- 15,000 Euros from the AUF and 15,000 Euros from CNRS-L for each call (co-fund with Lebanese Partner institution), Max of 2 projects per call).
- **Launching of the 2nd Call: May**

In a final session, **R. Atweh** introduced the H2020 Programme as the biggest EU Research and Innovation programme (2014 –2020); with **International cooperation** as important cross-cutting priority, focusing on research and innovation, in areas of common interest and mutual benefit.

R. Atweh presented some data on MPC and particularly Lebanese participation in FP7 Framework programmes, noting the qualitative shift of Lebanese Participation from passive to active partners; taking leadership in both project tasks and Work Packages; but also through the opportunity of project leadership:

- **INCAM:** Improving National Assessment and Monitoring Capacities for Integrated Environmental and Coastal ecosystem Management (CNRS-L)
- **LEB'IN:** Lebanon-Europe "on boarding" to innovate and enhance research links in health. (USJ/Berytech)

R. Atweh focused on opportunities for researchers and research intuitions within the Pillar 1 (Excellent Science): Marie Skłodowska-Curie actions (MSCA) & Research and Innovation Staff exchange programmes (RISE); focusing also on Pillar 3 (Societal Challenges).

Further information was also provided on the Search Facilities of H2020, Partner Search, and the Participant Portal as the Entry Point for all H2020 Programmes and Calls.

Useful Links:

H2020 Website: <http://ec.europa.eu/programmes/horizon2020/en>

H2020 (Find Your Area): <https://ec.europa.eu/programmes/horizon2020/en/find-your-area>

Participant Portal (Entry Point to all Calls and Programmes):

<https://ec.europa.eu/research/participants/portal/desktop/en/home.html>

Partner Search (Make the Most of your Contacts!!): <https://cordis.europa.eu/partners/web/guest>

As a National Contact Point of the H2020 Programme, the CNRS-L regularly holds information sessions on premises and joins university hosted research sessions.

R. Atweh also took the opportunity to present collaboration opportunities and joint project funding within the ERANETMED Call:

The ERANETMED project is part of the European Commission's Seventh Framework Programme (EU-FP7) that aims to improve cooperation and coordination of national research activities between European Countries and Mediterranean Partner Countries.



CNRS-L is a project partner (for enhancing collaboration) and a **Funding Agency** (for supporting bi-regional research projects):

First Call of the ERANETMED Project on *Water, Food and their Nexus*

[CNRS-L is supporting 3 bi-regional research projects:](#)

Participating Lebanese Institutions: Lebanese University (LU), American University of Beirut (AUB), Balamand University (BU), Notre Dame University (NDU) & INDEVCO

With Collaborative Partners From: France, Italy, Spain, Portugal, Greece and Cyprus

Second Call of the ERANETMED Project on *Sustainable Solutions for the Environmental Challenges Facing the Mediterranean Community*

[The CNRS-L will likely support 2 bi-regional projects](#)

Possibility of a **Third Call** for ERANETMED in discussion (2017).

At the end of the awareness session, participants highlighted the opportunities for research and collaborations presented. Stressing the need for increased collaboration and innovation through the presented programmes for dealing with common challenges and exchanging expertise and knowledge; while also noting the various actions covered from: collaborative research, mobility, & innovation.

Participants requested further information sessions (both at CNRS-L and at their institutions and universities – which will be developed with the CNRS-L) and keeping informed about the upcoming developments (PRIMA) and Calls Launched (National, Bi-lateral, H2020 and ERANETMED).

Annex I: Programme

Annex II: List of Participants

Annex III: Selected Pictures

MEDSPRING Project
Science Café and Awareness Raising Event
February 17, 2017

Within the objectives of the MEDSPRING Project 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 & innovation, policy dialogue and cooperation monitoring by creating institutional dialogues and coordination platform of governmental institutions, research organizations, & associations;

The National Council for Scientific Research will host two parallel events: a Science Café and Awareness Raising Event.

The **Science Café** aims to present the state of the art and research in Early Warning Systems, Solar Energy Applications & Marine Research in Lebanon as case studies and best practices for enhanced bi-regional collaborations.

In parallel, an **Awareness Raising Session** aims to increase national awareness of on-going efforts and activities to foster Euro-Mediterranean cooperation. In particular, the awareness meeting will present the main frame of:

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| Preliminary Programme | |
|---|--|
| 09:00 – 09:30 | Welcome Coffee |
| 09:30 – 10:00 | Welcome Words Dr. Ghaleb Faour , Director, Remote Sensing Centre (CNRS-L) Rula Atweh , Programme Officer, International Cooperation (CNRS-L) Claudio Bogliotti , MEDSPRING Project Coordinator (CIHEAM-Bari): MEDSPRING Project and Support for Joint Programming |
| 10:00 – 10:15 | PRIMA: The PRIMA Initiative - General Goals and Expected Impacts Maria Uccellatore (MIUR, Italy) |
| Science Café: Opportunities for EU-MED Research Collaborations | |
| 10:15 – 10:45 | Early Warning Systems Flood (Dr. Chadi Abdallah; CNRS-L) Earthquakes (Dr. Marlene Brax; CNRS-L) |
| 10:45 – 11:15 | Presentation of Solar Energy Application (Dr. Sara Najem; CNRS-L) |
| 11:15 – 12:15 | Projection of CANA Documentary (Dr. Milad Fakhri & Dr. Gaby Khalaf; CNRS-L) “Li Bahr Lubnan/For the Lebanese Sea” CANA Project for Marine Research in Lebanon |
| Awareness Raising on Collaborative Opportunities and Joint Programming | |
| 12:15 – 13:00 | Lebanese-EU Research Cooperation (CNR-CNRS; CNRS-L GRP) Presentation of Horizon 2020: Opportunities for Collaboration & Joint Programming (ERANETMED) (Elise Noujeim & Rula Atweh, CNRS-L) |
| 13:00 – 13:30 | Open Discussion |
| 13:30 – 14:00 | Lunch Reception |

Annex II

**MEDSPRING Project- Science Café and Awareness Raising Event
February 17, 2017**

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MEDSPRING Project- Science Café and Awareness Raising Event
February 17, 2017

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**MEDSPRING Project
Science Café and Awareness Raising Event
February 17, 2017**

