



O-LiFE - AN OBSERVATORY OF THE CRITICAL ZONE BETWEEN FRANCE AND LEBANON, IN A MEDITERRANEAN CONTEXT

Given the urgency to collect, perpetuate, share, and valorize environmental information, actors of the French and Lebanese scientific research wished to establish the foundation for a shared observatory between France and Lebanon. This is a first step, which aims subsequently the creation of an ambitious Circum-Mediterranean observatory network. The initiative is carried out in partnership with the MISTRALs program.

In France, the National Center for Scientific Research (CNRS), the Research Institute for Development (IRD) and the University of Montpellier 2 via its Observatory of the Sciences of the Universe (OREME) have associated with the Lebanese National Center for Scientific Research (CNRS-Lebanon) and several Lebanese and French universities (The University of Toulouse, the University of Grenoble, the Lebanese University, the University of Balamand, the University of Saint Joseph, the American University of Beirut, the University of Saint Esprit de Kaslik, Beirut Arab University, Lebanese American University) to create the O-LiFE observatory.

In summary, the main activity of the observatory is to study the critical zone of the earth around the Mediterranean, including the study of water resources, biodiversity, natural hazards, management of the environment and ultimately the study of land use. To carry out its mission, O-LiFE will provide means of mobility and shared services. The observatory aims to construct environmental databases, create collaborative software tools, and also provide the scientific and technical support to facilitate responses from researchers to international calls for tenders. The creation of an international associated laboratory between all actors involved will quickly materialize this initiative.

MISSION & OBJECTIVES

The Mediterranean basin is a priority area and a leading area for the analysis of environmental data, but also for the extrapolation of trends that will allow a better management of the present and help envisage plausible scenarios for the future. Understanding the mechanisms governing the functioning of the critical zone of the Mediterranean is essential to the protection of water, soil, and biodiversity resources.

From this observation, O-LiFE has the following objectives:

- Conduct simultaneously: Observation, Research, Training and Valorization
- Federate skills through common tools and objects
- Organize, share, sustain and enhance environmental data

To achieve these objectives, O-LiFE has defined five priority tasks:

- Build environmental databases of the critical zone in consideration
- Conduct monitoring services: Instrumenting, equip, assist in the operation and monitoring of sites
- Enhance environmental data and research among scientists, public policy makers, and the public in general, to promote a coordinated approach to sustainable development
- Facilitate the prospective approach and exchange through innovative web services
- Be a force of exploration and proposal for relevant calls for projects

Among the many important environmental issues in the Mediterranean basin, and more particularly in Lebanon, priority will be given to themes already having a body of data, and where there is also a sense of commitment by well-identified actors. These missions will be conducted on four priority themes, which will determine the activities of the Observatory during its start-up phase (2013-2015):

- Resources (water and biodiversity)
- Risks (waste management, urbanization, seismicity, pollution)
- Interaction between science and society and the social and environmental implications of environmental research and the sustainable development approach
- Training of and information to the general public and public policy makers

MEANS

Means (financial, technical and human) should be dedicated to the equipment and the operation of the Observatory, in close partnership between the groups already involved. The partners commit on measures on both short and long terms, so that their actions and common goals can be developed in the time required. The terms of engagement of each will be defined in the establishing agreement of O-LiFE.

Additional resources will be sought by the different partners through international tenders, where the effect of each should be amplified by this joint action, thus creating a strong lobbying effect.

In this context, the CNRS-Lebanon and the University of Montpellier 2 will make use of their common doctoral fellowships program as of this year to support the mission of the Observatory. The French and the Lebanese CNRS will both support the running of the observatory from its initial phase, in particular to enable the implementation of the prospective approach.



FOUNDING MEMBERS AND PARTNERS IN O-LiFE

The founding members of the initiative:

- The CNRS Lebanon
- The CNRS France
- The Research Institute for Development (IRD)
- The University of Montpellier 2 via l'OSU-OREME

In addition, the following Lebanese and French universities are partners of the Observatory:

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| • The University of Toulouse | • The American University of Beirut |
| • The University of Grenoble | • The University of Saint Esprit de Kaslik |
| • The Lebanese University | • Beirut Arab University |
| • The University of Balamand | • Lebanese American University |
| • The University of Saint Joseph | |

This initiative aims to expand to and involve all stakeholders wishing to provide support and to share the synergy implemented.

In its preparation phase, O-LiFE's coordinating cell is taken in charge by 6 people (part time) divided between CNRS Lebanon, CNRS France and the University of Montpellier 2. The creation of an International Associated Laboratory between all actors will materialize this initiative as of January 1st 2014.