



Impact of climate and human activities on Mediterranean eco-anthroposystems

SICMED aims to develop a multi-disciplinary research on biophysical, technical and social mechanisms in order to better understand the evolution of typical rural and peri-urban Mediterranean ecosystems

OBJECTIVE

SICMED will analyse the evolutions of Mediterranean ecosystems facing pressures from climate change and human activities.

A dual approach

SICMED develops a dual approach : thematic (process and/or methodological studies) and ecosystem-based. Several typical Mediterranean ecosystems are considered : irrigated and rain-fed farming systems, range and forest areas, peri-urban areas. Transition areas are also considered, especially those between semi-arid and barren environments whose dynamics are crucial for the knowledge and control of desertification processes, as well as coastal areas, which are places of massive human settling and receptor areas of upstream flows.

A multi-scale analysis

Based on a large and multilateral partnership involving scientific institutions and representative stakeholders, SICMED develops multi-scale analysis from local to global level. These ana-

lysis enable the study of social and human dynamics which cross spatial gradients of ecosystems.

The expected results concern cognitive and methodological aspects :

- Knowledge on the processes which are governing and impacting biogeo-chemical and hydrological balances and cycles in Mediterranean basin
- Tools and methodologies for supporting natural resource management and local development governance.



Oases are typical ecosystems situated at the fringe of the Mediterranean, where severe sustainability issues have to be solved (Palmyra oases - Syria).



Typical landscape management in Tunisia for water harvesting and erosion prevention.

THE PARTNERS IN THE PROJECT Surfaces et Interfaces Continentales en MEDITERRANÉE (SICMED) - 2009/2020: The project, supported by CNRS-INSU, INRA and IRD and a Mediterranean partnership is open to all research and educational institutions of Mediterranean countries. A first conference in Amman, may 2009 and subsequent contacts confirmed interest in participating in the project of the following countries and institutions: Algeria (University of Setif and Bab Ezzouar-Alger), Egypt (National Water Research Center, University of Alexandria, NARS), Jordan (HCST, Ministries of Agriculture and or Water and Irrigation, University of Jordan), Lebanon (University of Lebanon), Morocco (ENA Meknes, ENFI, IAV, INRA, University Cadi Ayad of Marrakech, Meteorological Office), Palestine (Applied Research Institute-water unitank), Syria (Damascus university), Tunisia (INAT, INRAT, INRGREF, IRESA), Turkey (Istanbul University) and ACSAD, CIHEAM, ICARDA.

