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ELVULMED
Livestock Vulnerability Adaptation Mediterranean

Research project ANR CEP&S, Edition 2010
Partners: CIRAD, INRA

Evulmed is an exploratory project aiming at integrating approaches of vulnerability and resilience in the context of a conceptual model. This model must be a first step toward an interdisciplinary approach to vulnerability and resilience.

Context

The Mediterranean Basin faces significant global changes :
•urbanization and demographic pressure on natural resources, mainly land and water;
•food habits and cultural changes;
•climate change: drought rhythm, temperature increase.
• Arabic Spring and diverse social concerns

Due to their historical and cultural links with the natural and social environment, livestock activities occupy a structural role in the social and spatial organization, and in the household economy, thanks to their adaptive capacity to harsh conditions.

Objectives

The exploratory project ELVULMED aims at :

• Analyzing the role of livestock activities in reducing **vu*lnerability*** at the farm/family and territorial levels in the face of global change

• Identifying key-determinants of ***adaptive processes*** in two contrasted zones: Provence Alpes-Côte d'Azur (PACA, France) and Matrouh (NWCZ, Egypt) by combining retrospective and spatial analyses.

Main research actions

• Family surveys on capital assets, farming practices, perception of changes: 180 families surveyed in NWCZ

• Risk zoning : spatial representation of changes in livestock activities and land use / land cover in PACA

• Retrospective analysis of perception and representations of past dynamics based on interviews from historical and policy science approaches integrated in a DPSIR model

• Interdisciplinary analysis of local case studies: for example understanding social configuration in Bedouin communities and its effects on the adaptation process in Naghamish *wadi*

•Prospective analysis of local development at regional scale

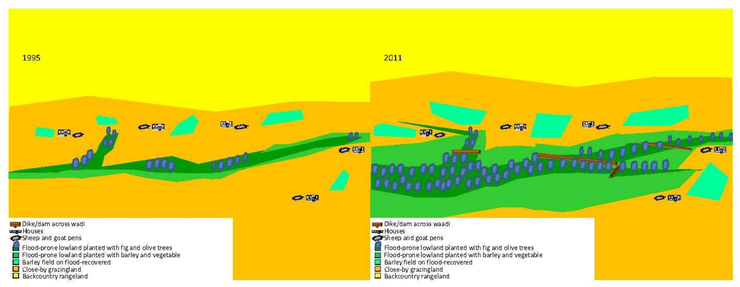
First results

▪Livestock is contributing to diversification strategies to address droughts: migration to Libya thanks to livestock keeping know-how, savings to be invested in new businesses in Egypt

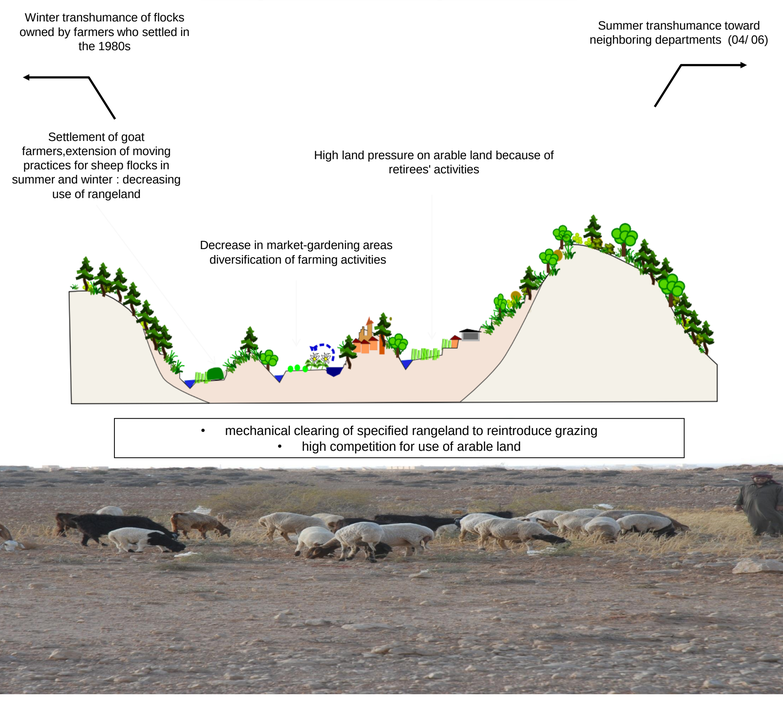
▪Understanding the co-evolution of **land use** in a *wadi* (fig 1a) and **livestock activities**

▪Importance of cross-scale analysis to understand adaptive capacities: livestock contributes to maintaining human activities in the hinterlands of Provence taking advantage of new opportunities provided by the territorial dynamics of the coastal zone (fig 1b).

Conceptual representation of change of agrarian systems of the wadi Medouah between 1995 and 2011 (east of Marsa Matrouh, Egypt)



1 b. Changes in land uses in Haut Var region from 1980 to to date



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Contact

Egypt: veronique.alary@cirad.fr

France: jacques.lasseur@avignon.inra.fr