The preservation of agriculture is a particularly important issue in the littoral plains of the Mediterranean areas where urban pressure is strong on rare and fragile agricultural lands. The decrease in fertile farmland in and around the cities may impact human nutrition by decreasing the local food supply. Farmlands can reduce the risk of flooding and fire, and improve the urban environment. The DAUME project proposes to produce knowledge useful to the renewal of the relationships between cities and agriculture. It intends to analyze the adaptation of agriculture to metropolitan proximity and its inclusion in urban public action. It also investigates the factors contributing to the emergence and success of the projects and the policies including agriculture and urban development, and the associated forms of governance.

Urban agriculture: agriculture which maintains a double connection of geographic proximity and of functionality with city; the urban agriculture includes intra- and peri-urban agriculture, performed by professional or non-professional farmers

Improving sustainability by connecting agriculture and cities

To analyze the sustainability of urban agriculture in Mediterranean areas, it is necessary to understand the changes in agriculture due to contact with urban areas and urban development. The DAUME project provides the interface for the integration of knowledge produced by urban, rural and agricultural research. This interplay of voices and viewpoints overcomes the usual divisions experienced by the researchers and the local stakeholders. DAUME links fundamental research to finalized research. It does this by producing concepts and schedules of interdisciplinary analysis and by constructing scenarios with - and for - stakeholders, public and professional actors, and civil society.
A compared analysis of five case studies in the Mediterranean area

The comparative dimension is the focus of the project with the study of five urban areas:

- **The urban area of Montpellier (France)** is marked by a historic specialization in wine production. But after several decades of urban growth and crisis in the wine industry, a lot of farms have disappeared. There is also a diversified local agriculture with the emergence of new agricultural forms and actors.

- **The urban area of Pisa (Italy)** has lost a lot of great potential agricultural land. The main issue is to maintain the water flow systems in the plains and the hills, the food production for the city and the protection of the agricultural lands.

- **The Leziria do Tejo near Lisbon (Portugal)** has had a dual agricultural dynamic for several years, between decline in family farms and development of agro-industrial entreprises. The institutional actors play an essential role in structuring urban development and maintaining a multifunctional peri-urban agriculture.

- **The urban area of Meknes (Morocco)** is confronted with real estate interests, the appearance of new urban centers, competition for limited underground water resources and pollution problems that threaten the quality of food products and water resources.

- **The metropolitan area of Constantine (Algeria)** has experienced a recent population growth with large tracts of agricultural spaces being engulfed as a result of public development programs and through the proliferation of illegal construction. Peri-urban agriculture faces problems of industrial and urban pollution.

To study agri-urban dynamics: to characterize spatial dynamics and landscape mosaics, land tenure and its evolution, urban policies, farms, … a whole range of items constituting the agri-urban system.

To identify the changes and the innovations that strengthen the links between agriculture and urban development.

To analyze the forms of territorial governance: how do actors mobilize legislation, how do they create and combine instruments to innovate, through what types of learning.

To implement scenario-based forecasting and to build local partnerships for more sustainable agri-urban systems.

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