

Innovation and Development of Rural Territories

- *Option “Rural societies, territories and natural resources management in the Mediterranean area”*
- *Option “Water institutions, management and territories”*

Organized by

Mediterranean Agronomic Institute of Montpellier

Innovation and Development of Rural Territories

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Aims

The aim of this Master's degree is to train specialists in the following areas: rural development, natural resources management, and sustainable development.

Around these core questions, the main objectives of this course are to:

- Identify the main characteristics of the evolution process affecting Mediterranean rural societies, spaces, and economies.
- Analyse rural development processes, i.e., territorial and multisector-based processes involving actors and local institutions. Master the institutional devices as well as the strategies and methods for improving the skills of rural development actors.
- Study the structural and agro-environmental actions and measures concerning territory organization at the origin of sustainable rural development policies.
- Analyse, through a certain number of examples observed in the North and in the South, the diversity of Mediterranean agricultures confronted with the changes occurring. Review adaptation and innovation processes within farms and the conditions of a sustainable agriculture.
- Acquire farm management methods and techniques allowing to promote sustainable production systems.

Objectives

The objective is thus to provide a training course through research which leads to the achievement of a Master thesis likely to be completed by a doctorate. This course comprises: lectures, seminars of methodology, field work, and modelling techniques as a tool for decision-making.

The **first part** is dedicated to the use of theoretical and practical methods and tools allowing trainees to be regularly put in real-life and professional situations: case studies, collective on-the-field training, applications.

The **second part** which is dedicated to individual research work and a thesis whose defence before an appointed jury leads to the Master of Science degree.

Part 1

Post-graduate specialization programme

This programme is organized in 9 units (60 ECTS)

- Prerequisites** - Upgrade in economics and management (microeconomics, accounting, financial analysis and statistics).
6-17 Sept. '10 - Upgrade in computer use (Word, Excel, PowerPoint, Internet).
- Introduction to documentary research.

Unit I **EPISTEMOLOGY AND RESEARCH METHODOLOGY IN SOCIAL SCIENCES (7 ECTS)**
20 September to 1st October '10

Content:

Disciplinary approaches of common concepts: Territories, Actors, Innovation, Rural Development.

Science definition to understand scientific construction in complex environments (representations, interaction levels, use of science for decision making, ...).

Science/society relationship regarding research practices in northern and southern contexts (disparities in the work of a researcher according to the contexts). The objective is to initiate a reflection around two dimensions of scientific research: the universality of knowledge on one hand and the researcher's work level of involvement and action on the other hand.

Learning outcomes:

- to master the various concepts and approaches related to the "Territory" notion,
- to be able to have a global approach covering geographical, sociological and economical analysis at the time.

Evaluation procedure:

Research work and synthetic written report

Option "Rural Societies, Territories and Natural Resources Management"

Unit II **SOCIETIES, ACTORS AND RURAL TERRITORIES IN THE MEDITERRANEAN (5 ECTS)**
4-22 Oct. '10

Content:

The course presents the major demographic, economic and social transformations in southern and northern rural societies. It is focused on a comparison between the north and the south. It analyses the role of institutions and actors (following the various forms of rural organisations) in the implementation of rural development strategies in order to understand how the activities, the strategies and the role of actors are combined in the framework of a social and economic territorial construction.

Methods: historical and theoretical approach of socio-economic and institutional changes and of management innovations; introduction to the economy and sociology of organisations; introduction to neo-institutional economy theories; introduction to the economy of territories.

Learning outcomes:

- to master the historical backgrounds of Mediterranean Northern and Southern rural societies

Evaluation procedure:

Classroom examination

Unit III
25 October to
12 Nov. '10

MEDITERRANEAN AGRICULTURES AND NATURAL RESOURCES MANAGEMENT (5 ECTS)

Content:

The first part of the analysis will deal with the transformations of the various Mediterranean agricultures in the context of the major transformations which affected the Mediterranean areas and territories (agro-pastoral agriculture, pluvial and plain irrigated agriculture, mountain agriculture, urban surrounding agriculture, haven agriculture, ...) and with the conditions of their durability.

Learning outcomes:

- to gain the knowledge of Mediterranean agricultures' diversity and of the evolution determiners,
- to be able to analyse their transformations and effects on the territory and on natural resources.

Evaluation procedure:

Classroom examination

Option "Water institutions, management and territories"

Unit II
4-22 Oct. '10

OVERVIEW, CHALLENGES AND STAKES (3 ECTS)

Content:

This introduction theme presents an overview of the current stakes and problems linked to water. It reminds the cycle and uses for water, the main world fluvial systems and it introduces the notion of "anthropised hydrosystem" concept. It analyses the main actors involved in water issues and the different ways of thinking which influence them, underlying the controversies and illustrating them with contemporary examples. It presents a review of the current dynamics and problems including the history of the valorisation of water resources in the various areas of the world and the different types of management and governance which are declined following the considered level.

Learning outcomes:

- to have the basic knowledge in hydrology, water uses and governance trends.

Evaluation procedure:

Classroom examination

Unit III
25 October to
12 Nov. '10

WATER AND ENVIRONMENT POLICIES (4 ECTS)

Content:

The increasing complexity of water problems has made obsolete most of national legislations on water. Since almost twenty years we have been observing a redefinition of legislative frames and policies. The course will point out that behind the formal definition of these policies an evolution of problems and repartition of decision power as well as a confrontation of models and ideologies are emerging. The course will also analyse at the same time the environmental policies because of their increasing importance but also of their close links with water issues.

The training presents the historical evolution of water policies in France (with a European perspective), the main actors, the stakes and the practice of territorial management in the framework of decentralisation and territorial planning policies. It focuses on the origin and the application of policies in southern countries insisting particularly on the fact that their policies are inspired of models which are not adapted to their local reality.

Learning outcomes:

- to gain the knowledge of the construction principles of water policies and of the application and regulation mechanisms of these policies in territories management.

Evaluation procedure:

Classroom examination

Option “Rural Societies, Territories and Natural Resources Management“

Option “Water institutions, management and territories“

Unit IV

15 November to
10 Dec. '10

RESEARCH METHODOLOGY IN SOCIAL SCIENCES (8 ECTS)

Content:

Various theoretical concepts, important for the master and at the basis of some current ways of thinking will be presented with some illustration by applying different methods: designing, comprehensive surveys, statistics surveys, systemic approach, ...

Learning outcomes:

- to master the qualitative and quantitative research implements.

Evaluation procedure:

Individual reading report about a fundamental author

Option “Water institutions, management and territories”

Unit V

13-17 Dec. '10

INTEGRATED MANAGEMENT OF WATER RESOURCES (in collaboration with the University Montpellier III)

Content:

The aim of integrated water resources management is to reach a better balance between the various objectives and the values expressed by society. It underlines the watershed (or hydrographic) reference as space rationalisation unit. The course will first present the origin and transformation of these concepts all over the time and it will also introduce the limitations, quotas and the European directive itself, which initiated these principles. It will afterwards familiarize students with the stochastic dimension of the hydraulic organisation and its consequences on the management of hydrosystems. The question will be studied through the use of a basin simulation model. Finally, the institutional dimensions of basins' management will be presented through a presentation of the various current forms of basins' governance and institutions.

Learning outcomes:

- to gain the knowledge of the methods and tools enabling the implementation of integrated management of water resource.

Evaluation procedure:

Group work and oral presentations

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Unit VI **COLLECTIVE MULTIDISCIPLINARY WORKSHOP COMBINING RESEARCH AND TRAINING ON THE FIELD (2 ECTS)**

24-28 Jan. '11

Content:

All the students will spend one week focusing on a territorial problematic linked to local concerns, even to a “social demand” with the support and supervision of a group of invited researchers and scientific coordinators involved in the various options of the Master. Each group will have to transpose this local problematic into research concerns and will after be divided in subgroups for the implementation of surveys. Various types of surveys will be experimented with actors. Empiric data will necessarily be completed with the mobilization of documentary resources (reports, scientific articles and books, local press, iconography, maps, ...).

This “collective exploration” of a local demand or concern transposed into a scientific context will enable the suggestion of new research hypothesis, the formulation of new questions or the answering to local needs on a social or territorial issue, thanks to information, problems formulation, synthesis of points of view, ...

Students will benefit from a large autonomy and will work in teams with professors and researchers in order to enhance the confrontation and synthesis of disciplinary points of view in the frame of an educational perspective.

Learning outcomes:

- to master the pre-diagnosis approach of a territory.

Evaluation procedure:

Market group work

Unit VII **SEMINAR FOR THE THESIS PROJECT ELABORATION (8 ECTS)**

Feb.–March '11

Content:

This course is composed of a seminar and tutorials aiming at helping students to prepare their research project, to make a documentary research and to carry out bibliographical analysis. It also put the student’s research project into perspective with the existing research work in social sciences.

Learning outcomes:

- to be able to draw up a thesis project, a thesis.

Evaluation procedure:

Oral presentation and classroom examination on computers.

Unit VIII **RESEARCH REPORT AND PRESENTATION (25 ECTS)**

April-June '11

Content:

The research report is the result of the student’s personal work. Each student is supervised by a professor or a researcher involved in this Master. The main objective is to indicate the feasibility of a thesis project, insisting on the methods and tools of the selected discipline or disciplines in case of a multidisciplinary approach. This work will be presented in front of a jury composed of the various disciplines part of the Master.

Evaluation procedure:

Presentation in front of a jury

ACADEMIC STAFF

During the first part of the programme, instruction is given by prestigious visiting lecturers from different countries, coming from higher education institutions, private companies, research centres, international organizations and administration bodies.

The international character of the program is also strengthened by the origin of attendants who come mostly from CIHEAM Mediterranean member countries but also from other parts of the world.

Part 2

The Master of Science programme

Thesis and defence (6 months, 60 ECTS) including:

Research thesis and its defence (60 ECTS)

Achievement of a research work carried out within a research team of the IAMM or an associated laboratory comprising of:

- Field work.
- The achievement of a research thesis.

Defence of the Master thesis before a jury of teachers-researchers and of professionals.

INDICATIVE MASTER THESES ACHIEVED IN “INNOVATION AND DEVELOPMENT OF RURAL TERRITORIES”

Option “Rural Societies, Territories and Natural Resources Management”

1. **Title:** Farming management of agrobiodiversity. Study of the millet and sorghum case in Mali (2010)
Author: ALFONSO BÉCARES Diana (Spain)
Thesis director: Anne-Marie JOUVE
2. **Title:** Link between agriculture and environment in the Regional Natural Park. Study of the « Haute Vallée de Chevreuse » (Ile de France) case (2009)
Author: BEN TAHAR Yosr (Tunisia)
Thesis director: Anne-Marie JOUVE
3. **Title:** Institutions, governance and rural development. Study of the farming development group Ouled H'lel (Ain Draham) case (2009)
Author: NAJEH Ali (Tunisia)
Thesis director: Omar BESSAOUD

Option “Water institutions, management and territories”

4. **Title:** The wastewater industry in Tunisia : evaluation and prospects (2009)
Author : HAMDY Mourad (Tunisia)
Thesis director : Hatem BELHOUCLETTE
5. **Title:** Analysis of the articulations within the traditional way of water management and association of the agricultural water users. Study of the rural town Ain Leuh (Morocco) case (2009)
Author: EL FARAH Fatima Zahra (Morocco)
Thesis director : Anne-Marie JOUVE

Detailed additional information is available at
http://www.iamm.fr/enseignement/master_of_science