



Advanced Course

# Innovations for sustainable Mediterranean pastoral systems

Zaragoza (Spain) • 30 May-7 June 2024



PASTINNOVA



PRIMA  
PARTNERSHIP FOR RESEARCH AND INNOVATION  
IN THE MEDITERRANEAN AREA



## Objective

Pastoralism is a land-based productive activity that fosters unique socio-cultural, environmental and economic benefits for Mediterranean societies, providing sustainable valorisation of natural resources for centuries and a wealth of knowledge embedded in traditional land use and animal husbandry practices. Pastoralism still plays an important role in the sustainable and inclusive rural development and provides multiple benefits; it constitutes an effective alternative to industrial livestock production and a pathway for agro-ecological transition and adaptation to contemporary changes.

However, pastoral farmers experience external pressures reducing their socio-economic performance and their access to markets, as well as their resource base. Modernisation of pastoral farms has altered their land-livestock-labour configuration, while 'pastoral identities' are threatened by excessive use of external resources. Rural youth often emigrate and men and women are affected in different ways by climate change, market integration and intensification challenges.

Innovations and business models, together with an enabling policy framework, are necessary to enhance the sustainability and competitiveness of pastoral farms, strengthening their vital role as drivers of thriving rural areas and resilient agri-food systems for generations to come.

This course is designed as a 'summer school' for young scientists and professionals. It aims to provide a multidimensional and transdisciplinary perspective of pastoralism and additional skills for working (research-innovation-development) with Mediterranean pastoral systems and peoples at local / regional / national levels.



At the end of the course, participants will have:

- a broad multidisciplinary view on scientific and methodological updates on pastoral research based on theoretical and practical evidence;
- competences in methods of technical and socioeconomic analysis of pastoral systems and product valorisation;
- deeper insights on the ecosystem services concept in the context of pastoralism, including methods for assessing their provision and recognising positive impacts on environment and society;
- a comprehensive understanding of concepts relating to system dynamics and resilience; collective initiatives; and inclusive development;
- tools to comprehend the policy framework of pastoral systems and to conduct policy analyses;
- a rich collection of practical experiences from on-site visits and case studies, allowing interactions with multiple pastoral actors and other course participants in an international environment.

## Organization

The course is jointly organised by the Mediterranean Agronomic Institute of Zaragoza (CIHEAM Zaragoza) and the partner institutions of the project PASTINNOVA "Innovative Models for Sustainable Future of Mediterranean Pastoral Systems", supported by the EU-PRIMA programme, GA No. 2113.

The course will take place at the Mediterranean Agronomic Institute of Zaragoza in morning and afternoon sessions from 30 May to 7 June 2024, including 5 days of training sessions and 3 days of field visits.

Theoretical concepts and methods will be complemented with practical tools and will be illustrated with a diversity of case studies, innovations and field visits focusing on different aspects. The international characteristics of the course will favour the exchange of experiences and points of view.

Sessions will be taught mainly in English and the organisation will provide simultaneous interpretation into/from Spanish if needed.



CIHEAM  
ZARAGOZA

Over 50 years promoting cooperation and development across the Mediterranean in agriculture, fisheries, food, environment and the rural world

## Programme

0. Opening and presentation of participants (1.5 hours)
1. Relevance of pastoral systems in the Mediterranean region (2 hours)
  - 1.1. Approaching pastoral farming from a system perspective. Contributions, opportunities and barriers for pastoral systems to face global change
  - 1.2. The Prima PASTINNOVA project approach to Mediterranean pastoralism and linked innovations
2. Technical management challenges: traditions and innovations (6.5 hours)
  - 2.1. Animal husbandry: diversity of resources and grazing behaviour
  - 2.2. Grazing resources management
  - 2.3. New technological tools for improving grazing management: from ICTs to genetic resources
  - 2.4. Traditional knowledge. Value, and how to integrate it into transformation
  - 2.5. Case study: Participatory assessment and management of rangelands
3. Understanding the economic sustainability of pastoral systems (3 hours)
  - 3.1. Market economic analysis of pastoral systems
  - 3.2. Pastoral product development (branding, product definition; consumer behaviour)
  - 3.3. Value chain development: example of transhumance
4. Environmental implications of pastoral systems (7 hours)
  - 4.1. Ecosystem services (ES) framework for the analysis of pastoral systems: concept, methods and approaches
  - 4.2. GHG emissions and carbon sequestration. LCA applied to pastoral systems
  - 4.3. Land degradation and restoration
  - 4.4. Pastoral systems and biodiversity
  - 4.5. Case studies: ES provided by mountain grassland under different management scenarios; co-design process of agri-environmental measures at landscape scale
5. Social and governance aspects in pastoralism (7 hours)
  - 5.1. Resilience, vulnerability, and reproduction of pastoral systems in the face of global change
  - 5.2. Governing the commons, frameworks, and conflicts. The case of land use
  - 5.3. Power relations and pressure groups at different scales (inclusiveness)
  - 5.4. Pastoralism and nature conservation conflicts - wildlife - predation
  - 5.5. Facilitation skills and participatory methods. Organising collective initiatives in pastoralism. Presentation of a real case study or a role game
  - 5.6. Pastoral schools. Case study
6. Public action to promote the role of Mediterranean pastoralism for sustainable livestock production (6 hours)
  - 6.1. Mental models, representations and paradigms driving policies on animal production: How pastoralism could answer the challenges of animal production in the Mediterranean
  - 6.2. CAP, pastoralism and prospects for the new programme period (after 2028)
  - 6.3. The principles of prospective analysis and its application to pastoralism (presentation of the example of Corsica)
  - 6.4. Sanitary regulations in artisanal production - QUERED experience in artisanal cheeses
  - 6.5. Communicating on pastoralism: opportunities and tools
7. Lessons learned and conclusions (1 hour)
8. Field visits: Initiatives and innovations around pastoralism, extensive livestock and territorial development in the Aragon Region, both in semiarid plains and mountain areas.

## Guest lecturers

Blanco, Juan Carlos - Consultants on Conservation Biology SL (Spain)  
D'Ottavio, Paride - Polytechnic Univ. Marche, Ancona (Italy)  
Dubeuf, Jean Paul - INRAE-Corte, Corsica (France)  
Franca, Antonello - CNR-ISPAAM, Sassari (Italy)  
Francioni, Mateo - Polytechnic Univ. Marche, Ancona (Italy)  
Karatassiou, Maria - Aristotle Univ. Thessaloniki (Greece)  
Koloman, Nazan - Univ. Çukurova, Adana (Türkiye)  
López-Marco, Lucía - Mallata (Spain)  
López i Gelats, Feliu - Univ. Vic (Spain)  
Martin, Daniel - CITA, Zaragoza (Spain)  
Nori, Michele - EC-DG Agri, Brussels (Belgium)  
Palau, Guillermo - CSIC-Ingenio, Valencia (Spain)  
Pueyo, Yolanda - CSIC-IPE, Zaragoza (Spain)  
Ragkos, Athanasios - ELGO-DIMITRA, Athens (Greece)  
Rivera-Ferré, Marta - CSIC-Ingenio, Valencia (Spain)  
Tarhouni, Mohamed - IRA, Medenine (Tunisia)  
Vagnoni, Enrico - CNR-IBIMET, Sassari (Italy)  
Veiga, Maria - QUERED (Spain)



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**PASTINNOVA** aims to deliver innovations, sustainable business and organisational models for profitable and resilient pastoral farms and value chains increasing smallholders' potential for market access and value adding, contributing to revitalising mountain and marginal areas and fulfilling social expectations.

## Admission

The course is designed for 30 professionals with a university degree. It is intended for young (under 35 years old) scientists and other professionals, such as technical advisors, consultants, rural development agents, environmentalists, etc., working in public or private organisations, and directly involved in pastoralism research and development in Mediterranean countries.

Knowledge of English will be valued in the selection of candidates.

## Registration

- Candidates may apply online at the following address: <http://www.admission.iamz.ciheam.org/en/>
- Applications must include the curriculum vitae and a copy of the supporting documents most related to the subject of the course.
- The deadline for the submission of applications is 3rd March 2024. It may be extended if there are places available.
- Applications from candidates requiring authorisation to attend the course may be accepted provisionally.
- This course is financed by the PRIMA programme so there are no registration fees.

## Support to candidates

Candidates working on pastoralism in Mediterranean countries may apply, during the registration process, for financial support covering totally or partially the cost of travel and accommodation in Zaragoza and field visits.

Candidates from other countries who require financial support should apply directly to other national or international institutions.

## Insurance

It is compulsory for participants to have medical insurance valid for Spain. Proof of insurance cover must be given at the beginning of the course. Those who so wish may participate in a collective insurance policy taken out by the Organisation, upon payment of the stipulated sum.

**Contact:** **Aguinaco, Maite**  
Academic coordinator  
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<https://edu.iamz.ciheam.org/PastoralSystems>

