



#### Erasmus+ BIP

### New Challenges in Livestock Production under Mediterranean climate 2026

Precision Livestock Farming (PLF) and the Sustainability of Animal Production



Member of





#### BIP Partnership - 6 universities from 6 European countries

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#### Why this BIP?



Currently, livestock producers are enhancing their farms as much as they can, which leads to a growing demand for solutions increasingly supported by IoT, mechatronic and remote sensing resources.

Therefore, it is essential that the livestock sector adopts a forward -looking approach, already using the available technological solutions in the present with a view to:



optimize the production of meat, milk and eggs in all production species;



improve the efficiency of maintenance, feeding and reproduction;



uphold and improve animal welfare standards, while increasing production and simultaneously protecting the environment.

#### These are pressing issues that require innovative solutions



## SO, EMBRACE THIS CHALLENGE! Food production and Take care of our Future

During this program, our goal is to explore all these challenges and work collaboratively to find solutions for the future, in particular under Mediterranean climate condition affected by climate change.

Also, you will have the opportunity to benefit from practical training, dynamic workshops, visits, and multicultural social contexts.

Level up your CV — and launch yourself ahead in the job market!

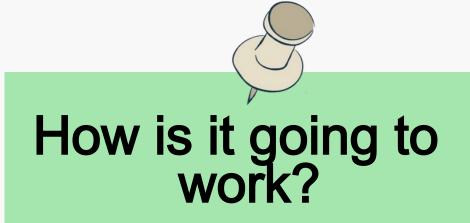




Polytechnic University of Beja — School of Agriculture, city of Beja

Portugal





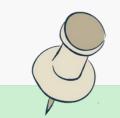
On-line meetings (1 ECTS) before April 2026 schedule still to define

Face-to-face week (2 ECTS): April 13 – 17th 2026

•Registration Deadline: 31.12.2025

Target audience: first cycle/Bachelor's or equivalent level - .students with a background in Agronomy, Animal Science, Food Technology, Environmental Sciences, or Computer Science.

#### How is it going to work?

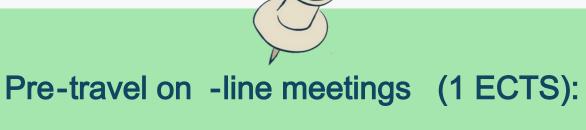


IPBeja
POLYTECHNIC UNIVERSITY
OF BEJA
INSTITUTO POLITÉCNICO DE BEJA

Total number of ECTS 3

Language : English

Local: Beja (Portugal)



1st on-line meeting: Welcome session. Program overview. Engaging online activities to help students get to know each other, interact, and prepare for collaborative work. Introduction of the topic to be addressed during the face-to-face week: Mediterranean climate issues and animal production. Task assignment - Polytechnic University of Beja/Portugal

2<sup>nd</sup> on-line meeting: Characterization of the Mediterranean environment (soils and climate) and a theoretical introduction to the adaptations and production models that farmers follow to overcome the difficulties imposed by this specific environment. Topics such as climate will be addressed, with emphasis on the precipitation regime and thermal balance throughout the year and their impact on pasture and forage crops. Native breeds and their capacity for adaptation will also be addressed - Polytechnic University of Beja/Portugal

3<sup>rd</sup> on-line meeting: Introduction to the concept of precision livestock farming (PLF). Definition and basic concepts. Role of technology in improving herd management. Overview of economic and environmental benefits. Challenges and outlook. Technological and economic barriers to widespread adoption. Future trends: Al integration, automation, and sustainability-focused innovations - Mendel University in BRN/Czech Republic

#### How is it going to work?





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Face-to-face week (2 ECTS):



- Workshop: Technologies used in PLF. Sensors and IoT (Internet of Things) devices for real-time data collection. Remote monitoring systems for animal behaviour and environment. Data analysis software for decision-making support. Examples of practical applications University of Córdoba/Spain
- Workshop: About ethics and livestock production. The need to produce more food, particularly of animal origin, presupposes that this cannot be achieved at any cost. For this reason, production ethics will also be addressed, seeking to give students an integrated perspective of the psychological and social aspects parallel to the technical, economic and environmental aspects of animal production Aeres University of Applied Sciences /The Netherlands.
- Collaborative projects . Following the methodology from the previous day, students will improve their task proposal based on: the overview provided about PFL tools, presentation of real-world examples of farms using PLF; issues of an integrated perspective of the psychological and social aspects along with technical, economic and environmental aspects of animal production . Presentation of task assignment .



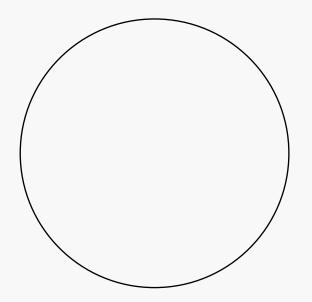
Field visits within the context of the upcoming BIP aim to provide an overview of the animal production chain, starting with an extensive beef cow farm and ending with intensive fattening and finishing operations farm.

Visit EDIA (Empresa de Infra -estruturas e Desenvolvimento do Alqueva), responsible for the biggest irrigation project in Portugal, which has changed the agricultural systems in Alentejo region, with significant impacts at an economic, landscape, environmental and social level. This visit will seek to give students an insight into how the region and its institutions are already dealing with the new climate reality.

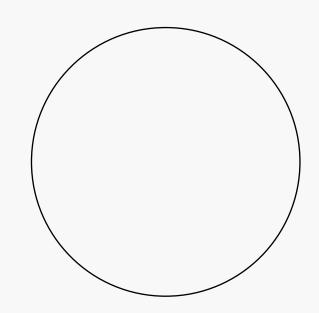
Cultural and social activities



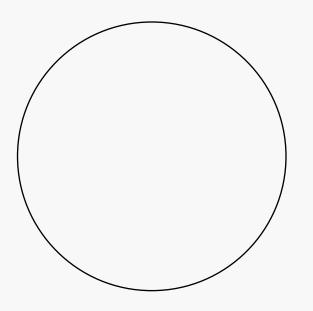
#### Our Team



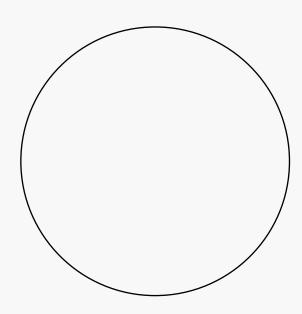
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#### We would like to invite you to this programme so that, tog can contribute for a better Europe and a better Worl





# Thank you Obrigado

#### **Coordination Institution contacts:**

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