



# EcoLamb

Holistic Production to Reduce the Ecological  
Footprint of Meat

Dr. Sinan Ogun



1<sup>ST</sup> SusAn COFUNDED Projects Seminar  
23-24 November 2017, Bilboa (BC, ES)

**EUROPEAN RESEARCH AREA ON SUSTAINABLE ANIMAL PRODUCTION**



The ERA-net Cofund SusAn is funded by European Union's Horizon 2020 Research and Innovation programme under grant agreement n° 696231

# Index

- The Challenge
- SUSAN's Research Areas
- Our Goals and Objective
- How will EcoLamb achieve these?
- Consortium Partners
- Potential impact



ERA-NET **SUSAN**

# The Challenge

Holistic Production to Reduce the Ecological Footprint of Meat (EcoLamb)



# ERA – NET SusAn Research Areas

- ✓ **Research Area 1:** Improve the productivity, resilience and competitiveness of European Animal Production,
- ✓ **Research Area 2:** Improve and manage resource use to reduce waste and enhance the environmental sustainability of European Animal Production,
- ✓ **Research Area 3:** Improve on-farm practices to enhance consumer acceptability and address societal challenges associated with animal welfare, product quality and safety, biodiversity and provision of ecosystem services.



ERA-NET **SUSAN**

# Our Goal

Farm  
Typology



Animal  
Welfare

Meat Quality



# Our Objective

## **Consumer Expectations**

Animal Welfare & Meat Quality

## **Industry Best Practice**

Innovative Farm Solutions



**Competitive Brand**

# How?

**EcoLamb, will:**

1. Improve production and productivity by agro-ecosystem analysis and characterization in order to maintain and preserve the equilibrium of the natural environment.



ERA-NET **SUSAN**

# How?

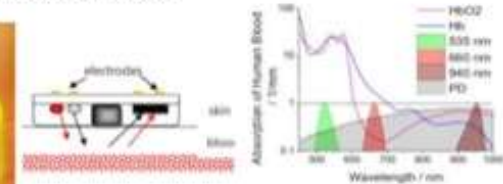
## EcoLamb, will:

2. Study animal welfare factors associated with sheep production to develop knowledge about acute and chronic stress indicators.



### BLE Sensor Board

- The smart sensor board including Bluetooth Smart connectivity comes with a range of sensors including: Temperature, Humidity, Blood Sensor.



Absorption blood (oxyhemoglobin, HbO<sub>2</sub> and hemoglobin, Hb) vs wavelength of light.



Wireless Temperature Sensor



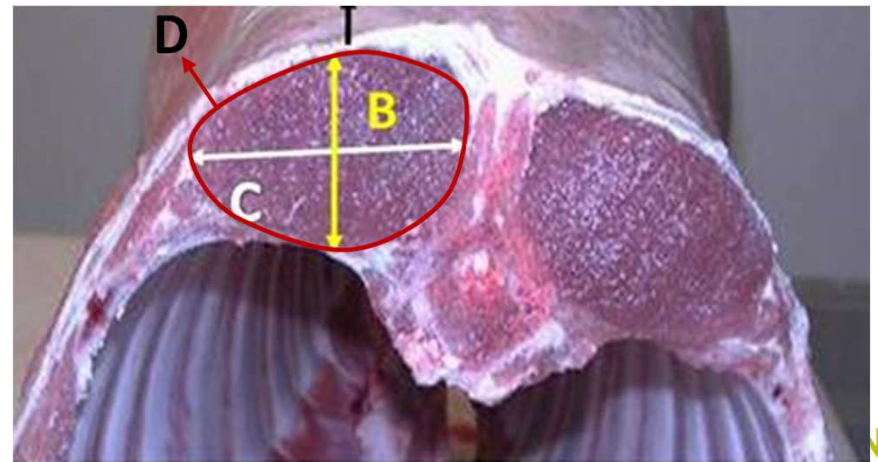
ERA-NET **SUSAN**



# How?

**EcoLamb, will:**

3. Improve additional product safety and healthiness by introducing improved farming standards.



# How?

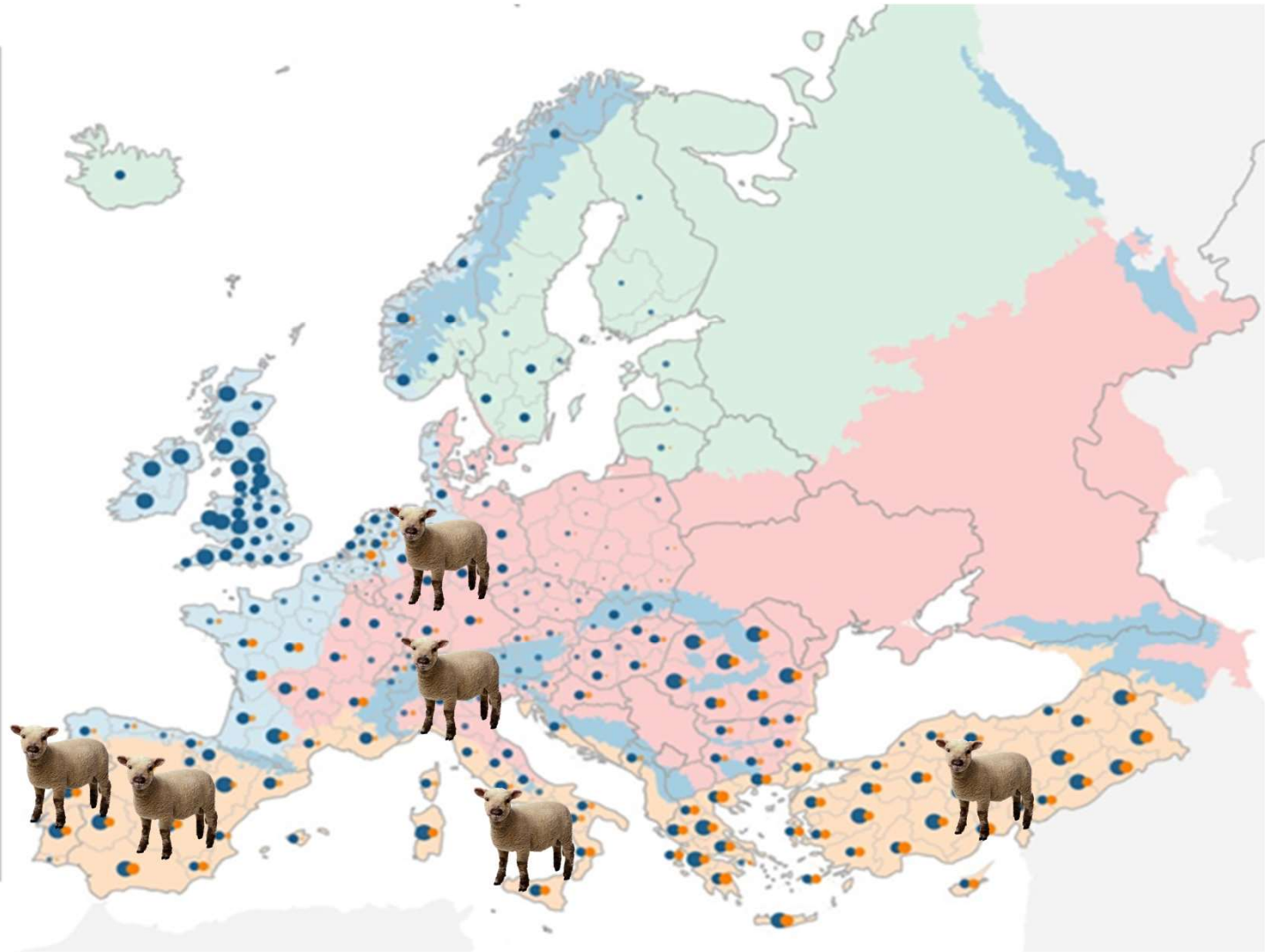
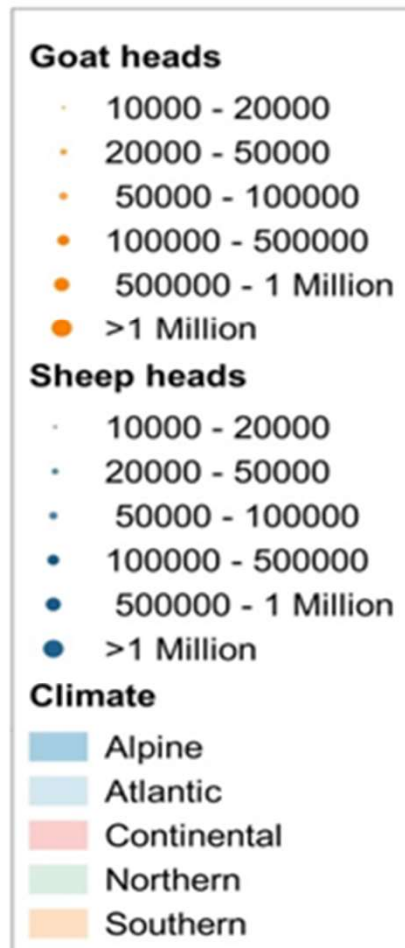
## EcoLamb, will:

4. Develop new economic models for EU sheep production through innovative & novel marketing methods and different commercial presentations.



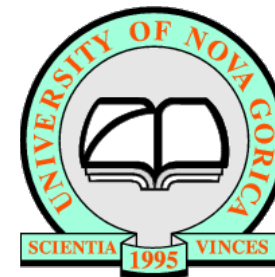
ERA-NET **SUSAN**

# Consortium





# Consortium Partners



ERA-NET **SUSAN**

# Consortium Members

- **TURKEY - Rural Revival Research & Development Ltd. Sti. (RRAPRD)** Sustainable agricultural development experience worldwide, managing numerous case study sheep farms in Turkey.
- **NORTH-WEST SPAIN - Meat Technology Centre (CTC).** Streamlining and improving meat sector competitiveness. Field research and testing to transfer livestock breeding techniques to farmers.
- **SPAIN (Asturias) – SERIDA.** Livestock management and pasture improvement expertise. Developing novel and value added meat products and efficient transfer of outcomes to Spain's small ruminant sector.
- **SPAIN – ITACYL –** Ruminant nutrition and management knowledge sharing with industry. Skills in implementation of novel information and communication technologies. Remote control real-time data collection in extensive grazing situations.



ERA-NET **SUSAN**



# Consortium Members

- **ITALY - University of Turin (UNITO).** Slaughterhouse facilities for teaching and testing purposes. Developed infrastructure and technology for testing and evaluating animal welfare factors using electronic eartag sensors.
- **PORTUGAL - CIMO-IPB.** Developed intervention strategies to reduce of pathogen growth in post slaughter meat. Advancing cutting-edge statistical tools for the control of pathogens in meat products.
- **GERMANY - University of Stuttgart, (USTUTT).** Expertise in life cycle engineering and analyses of products, processes and services in terms of their ecological, economic, technical and social aspects.
- **SLOVENIA – University of Novi Gorici (UNG)** Strong capacity for research and development in sustainable and innovative programs for improving animal welfare in particular hair cortisol based stress indicators.



ERA-NET **SUSAN**

# Potential Impact



ERA-NET **SUSAN**

# Potential Impact

- ***Increased efficiency and profitability:***

Management strategies incorporating resilience, adaptation and welfare traits to provide population-level solutions - implemented at farm-level, increasing the efficiency of the enterprise.



ERA-NET **SUSAN**

# Potential Impact

- *Improved overall sustainability and innovative capacity of the livestock sector ;*

Case studies that include innovative approaches on farms to reduce stress factors



ERA-NET **SUSAN**

# Potential Impact

- ***Preservation of biodiversity and cultural heritage***

*Using sheep in marginal areas will not only minimize loss of traditional landscapes and biodiversity but also assist in preserving cultural heritage*



ERA-NET **SUSAN**



# Potential Impact

- ***Preservation of livestock genetic diversity*** by improving the role of local endemic breeds.



ERA-NET **SUSAN**

# Potential Impact

- ***Increasing societal acceptance of products by branding low ecological footprint and improved resource utilisation on labels.***



ERA-NET **SUSAN**

# Potential Impact

- *Improvement in the quality of life of smallholders*



ERA-NET **SUSAN**

# Potential Impact

- ***Added Value***

The Quality Certification of agro-food products through the quality labels Protected Origin Denomination (POD), Protected Geographic Indication (PGI) and Specialty Certification (SC), aims to support these products by increasing their market value.



ERA-NET **SUSAN**

# Potential Impact

In Other words the project impacts on all of the aspects of the SCAR sustainability triangle :

- ✓ **economic competitiveness,**
- ✓ **social acceptability and**
- ✓ **environmental protection**



ERA-NET **SUSAN**





Thank you for  
your attention



ERA-NET **SUSAN**