



Innovation for Sustainable
Sheep and Goat
Production in Europe

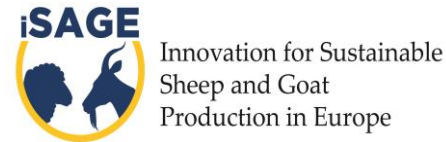
Holistic approach to improving European sheep and goat sectors - iSAGE

**Participatory approach to research,
dissemination and implementation**

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iSAGE



- iSAGE is coordinated by the Aristotle University of Thessaloniki. It has a multi-lateral consortium consisting of 33 partners from 6 EU countries and Turkey.
- Nineteen partners represent the industrial sector with about 16,000 sheep and goat farmers and 5.5 million sheep and goats.
- The project will last 4 years and started in March 2016.



Objectives for sheep and goat sectors in Europe

iSAGE will improve the overall sustainability and innovative capacity of the sheep and goat sectors in Europe:

- Make them sustainable, efficient and profitable
- Meet consumer needs
- Increase social acceptance of sheep and goats products
- Improve the delivery of ecosystem services

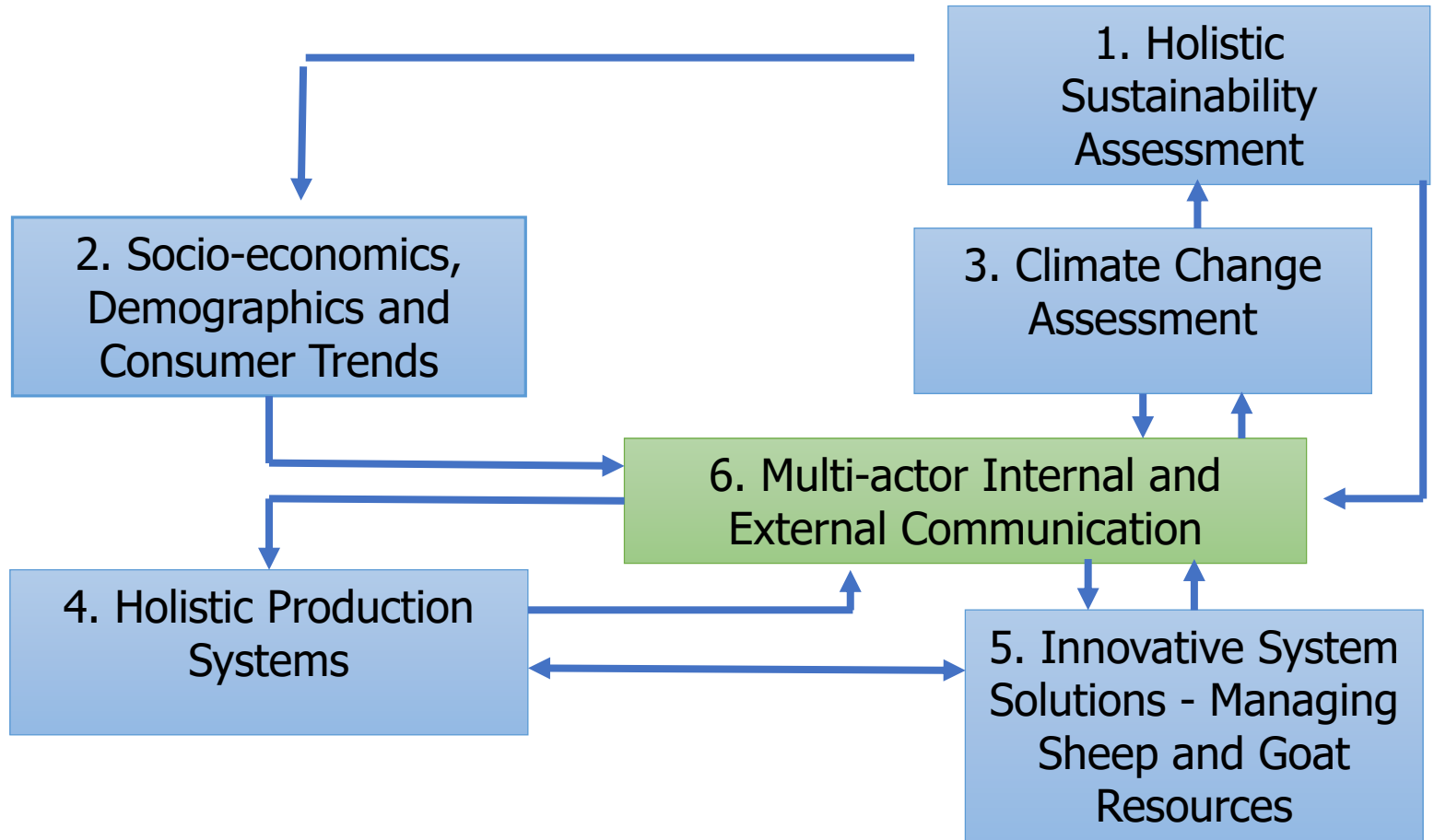


iSAGE will develop new socio-economic, animal welfare and sustainability assessment tools for the whole supply chain in order to:

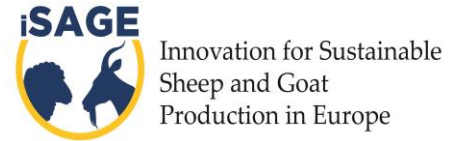
- Understand barriers to innovation and development
- Define future opportunities for a competitive sheep and goat sector
- Develop farm management tools and innovative breeding strategies
- Develop solutions for social, welfare and consumer issues
- Work with industry to inform, help and teach

[The work is carried out through 6 interlinked work packages](#)

Six Interlinked Work Packages



Work Packages



- **WP1 - Holistic Sustainability Assessment**

To assess the sustainability of different types of S&G farming systems using social, economic and animal welfare indicators.

To develop a novel toolbox of assessment tools for future sustainability assessments.

- **WP2 - Socio-economic, Demographics and Consumer Trends**

To identify in greater depth geographic, demographic and other socio-economic variables and understand their impact on farmers and the whole supply chain.

To better understand consumers and societal interests

WP3 – Climate change assessment

Review scientific information of the impact of climate change on pasture and animal production related to S&G farming systems.

Provide a link between iSAGE and ongoing/past EU projects and actions (e.g. ANIMALCHANGE, MULTISWARD, Legume Futures, SOLID, FACCE JPI, MACSUR).

To build meta-models that can be incorporated into a whole-farm model (i.e. case studies) in WP4 to find strategies to help S&G farming systems adapt to climate change.



WP4 – Holistic Production Systems

Bring together outcomes from work packages 1, 2, 3 and 5 to design and test innovative management practices for sheep and goat farmers.

Solutions will be identified and will be tested in case-study farms and using holistic farm modelling.

New decision support tools will be developed.



WP5 – Innovative System Solutions / Managing Sheep and Goat Resources

Innovative population-level genetic resource management and breeding solutions will be developed to help the industry cope with future challenges.

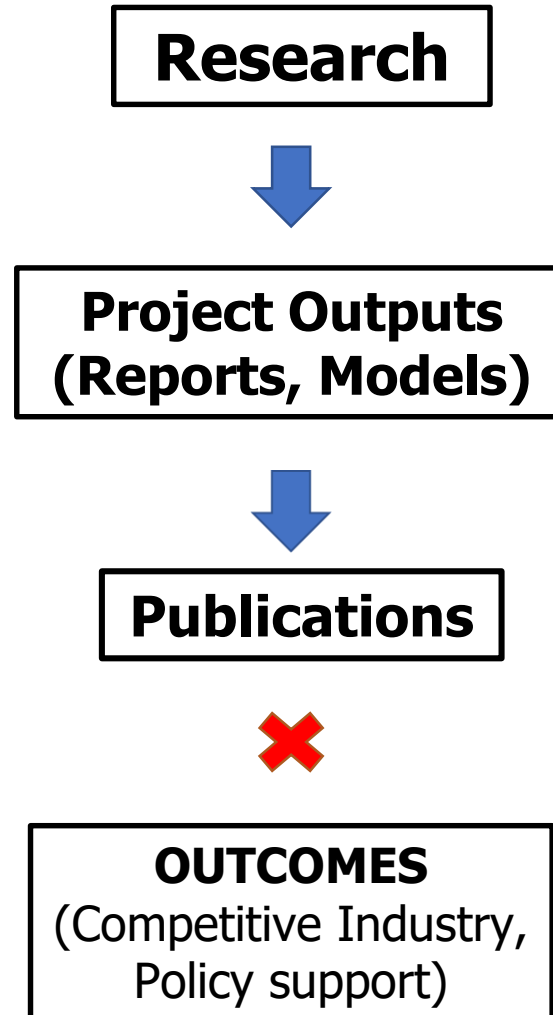
New breeding solutions will be developed through literature research, field data analyses and simulation studies.



WP 6
Multi-actor Internal and
External
Communication

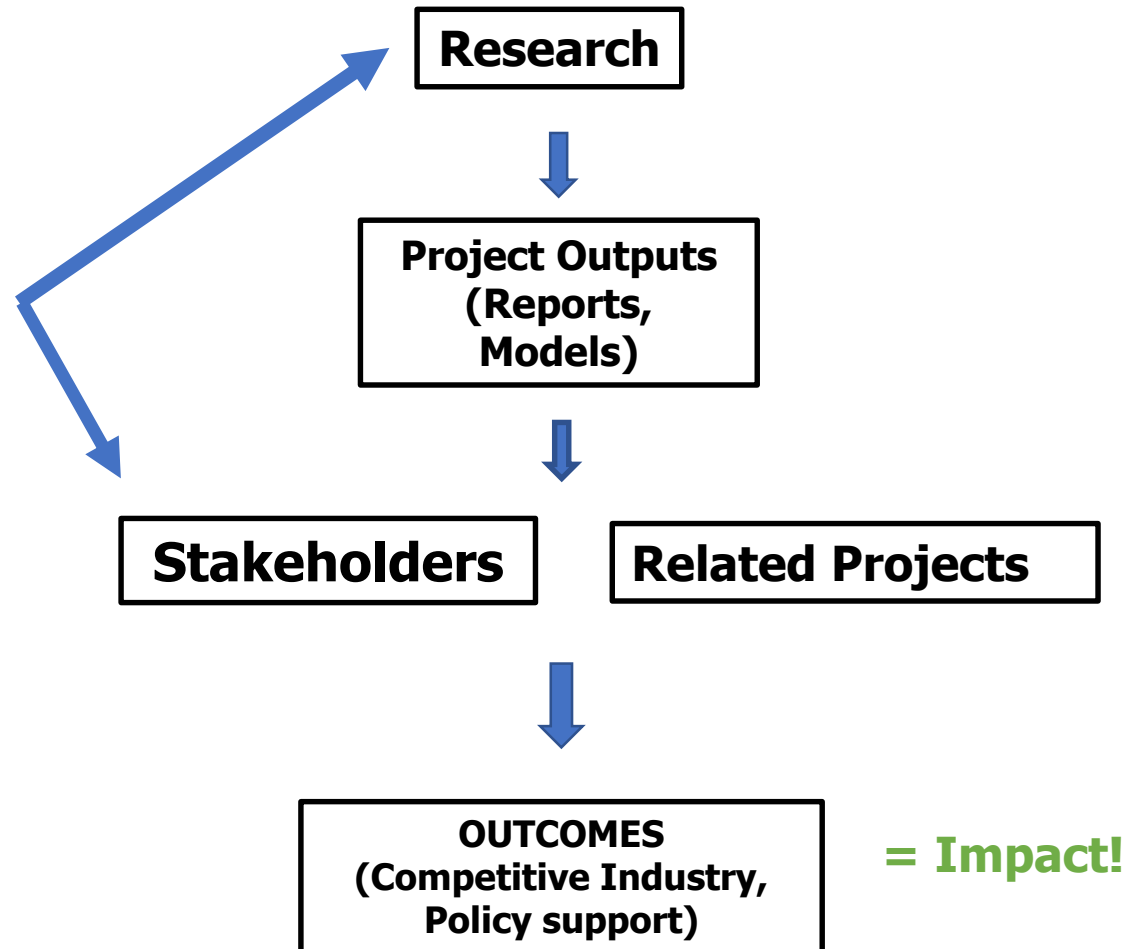
Participatory Approach

Top Down Dissemination Model





Dissemination Model



Effective Dissemination

- Identify project stakeholders
- Involve stakeholders in research and dissemination
- Use appropriate media to target the stakeholders

In iSAGE the stakeholders are full partners of the project



Knowledge exchange activities between stakeholders and research partners

Communication between researchers and stakeholders to ensure that:

- Research outputs are relevant to industry needs
- Stakeholders' perspectives are taken into account during the development of the research programme
- Dissemination and training plans will favour efficient uptake of project outputs during and after the project.

Implemented through 6-monthly meetings between research and industry partners



Establish a knowledge exchange network

- Establish a link with  eip-agri
AGRICULTURE & INNOVATION
- Create links with other EU projects and networks, particularly Sheepnet, AWIN, SheepRep, ROSEI, 3SR, SOLID
- Jointly apply for dissemination support through CDB



The Essential Hands-on Service for R&I Projects

Dissemination activities

- Website (www.isage.eu) and social media
- Brochure, poster and newsletters
- New Food Product Demonstrations with WP2 in 2018/19
- National and Regional Workshops in 2019
- Sessions in international conferences (e.g. EAAP Annual Meeting, International Conference on Goats)

Enhance Capacity

Face to face

- Summer School (PhD, post doc)
- 4 regional technical training courses (extension services, industry, technicians)

Web-based

Interactive e-learning courses based on the subjects presented at the summer school and the regional training courses

Outcomes

iSAGE will provide solutions to **re-design sheep and goat systems** that will result in:

- Increased efficiency and profitability
- Improved overall sustainability and innovative capacity of the sector
- Enhanced consumer acceptance
- Increased societal acceptance
- New efficiency traits of animals more adapted to environmental changes
- Increased level of animal welfare
- Improved social well-being and rural development



iSAGE results at EAAP



Innovation for Sustainable
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- 1. Sheep dairy and meat products: from urban consumers' perspective to industry innovations.** *D. Martin-Collado, C. Díaz, M. Serrano, M. J. Carabaño, M. Ramón, and R. Zanolì.* Theatre, session 01, 27 August 2018, 08:30 - 12:30.
- 2. Effect of an alternative rearing method on milk production and lamb weight gain.** *Termatzidou S., Siachos N., Kazana P., Rose I., Arsenos G.* Poster, session 51, 29 August 2018, 14:00 - 18:00.
- 3. Adaptation to Mediterranean climate challenge in ruminants: Thermal tolerance phenotypes and genetics.** *M.J. Carabaño, M. Ramón, M. Usala, M. Serrano, J.M. Serradilla, C. Meneses, M.A. Jiménez, M.D. Pérez-Guzmán, A. Molina, R. Gallego, F. Freire, C. Díaz.* Theatre, session 65, 30 August 2018, 14:00 - 18:00.
- 4. Characterization of dairy sheep and goats production systems in France: first step towards a GXE study.** *H. Larroque, G. Lagriffoul, A. Combasteix, J.M. Astruc, V. Clément, D. Hazard, A. Rolland, I. Palhière* Poster, session 65, 30 August 2018, 14:00 – 18.00.
- 5. Implications of climate change on small ruminant systems in Europe.** *G. Pardo, S. Mullender, K. Zaralis, M. Dellar, D. Yañez-Ruiz, M.J. Carabaño, A. Del Prado.* Theatre, session 69, 30 August 2018, 14:00 - 18:00.