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# Update on TechCare: innovative technologies to improve small ruminant welfare

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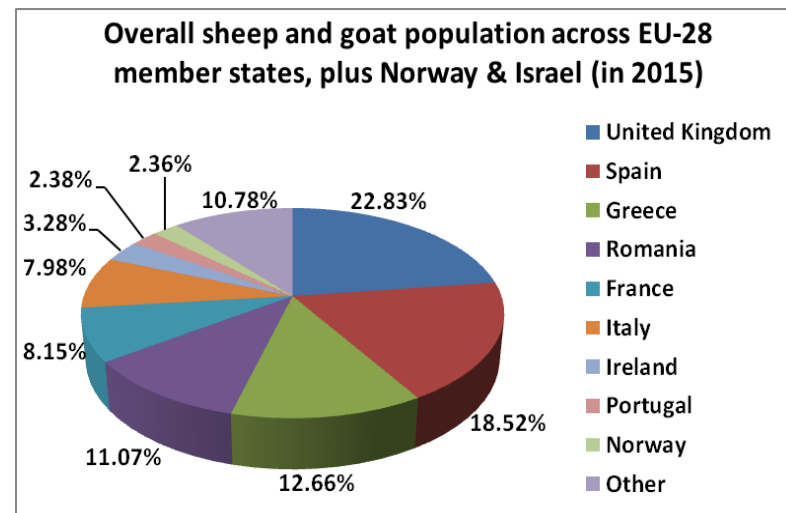
# Outline

1. Context
2. The project
3. Objectives
4. Steps & Outputs
5. Activities so far
6. What next?



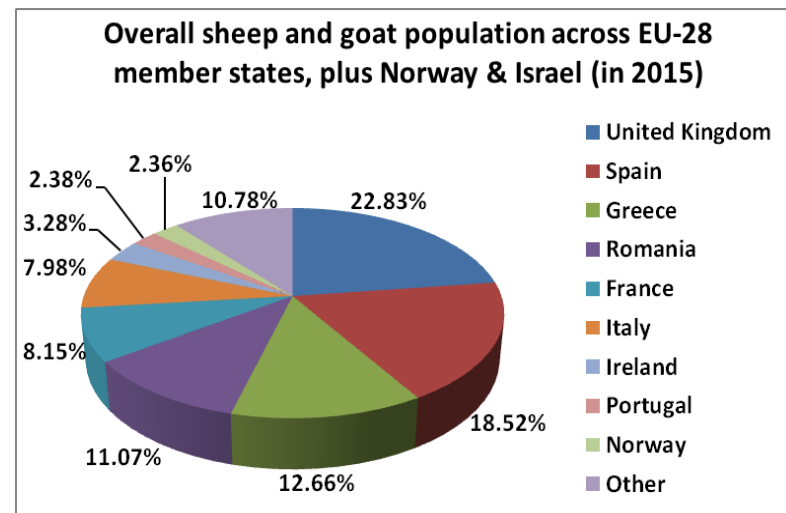
# TechCare - Context

- Sheep & goats:  
~ 98 m in EU + 2.4 m in Norway & 0.67m in Israel.
- Mostly in challenging environments, based on natural feed resources
- Extensive/semi-intensive/intensive systems
- Part of the landscape, traditions and cultural heritage
- Labour issues



# TechCare - Context

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***Sheep & goats: crucial role for the economy, society, biodiversity and maintaining cultural heritage***

***But increasing lack of labour may have a severe impact on the attention and care animals receive.***



# TechCare – Welfare & PLF

- PLF: ‘high value’ animal sectors vs sheep & goats
- Welfare and production efficiency advantages
- Welfare of sheep & goats often overlooked



# TechCare – Welfare & PLF

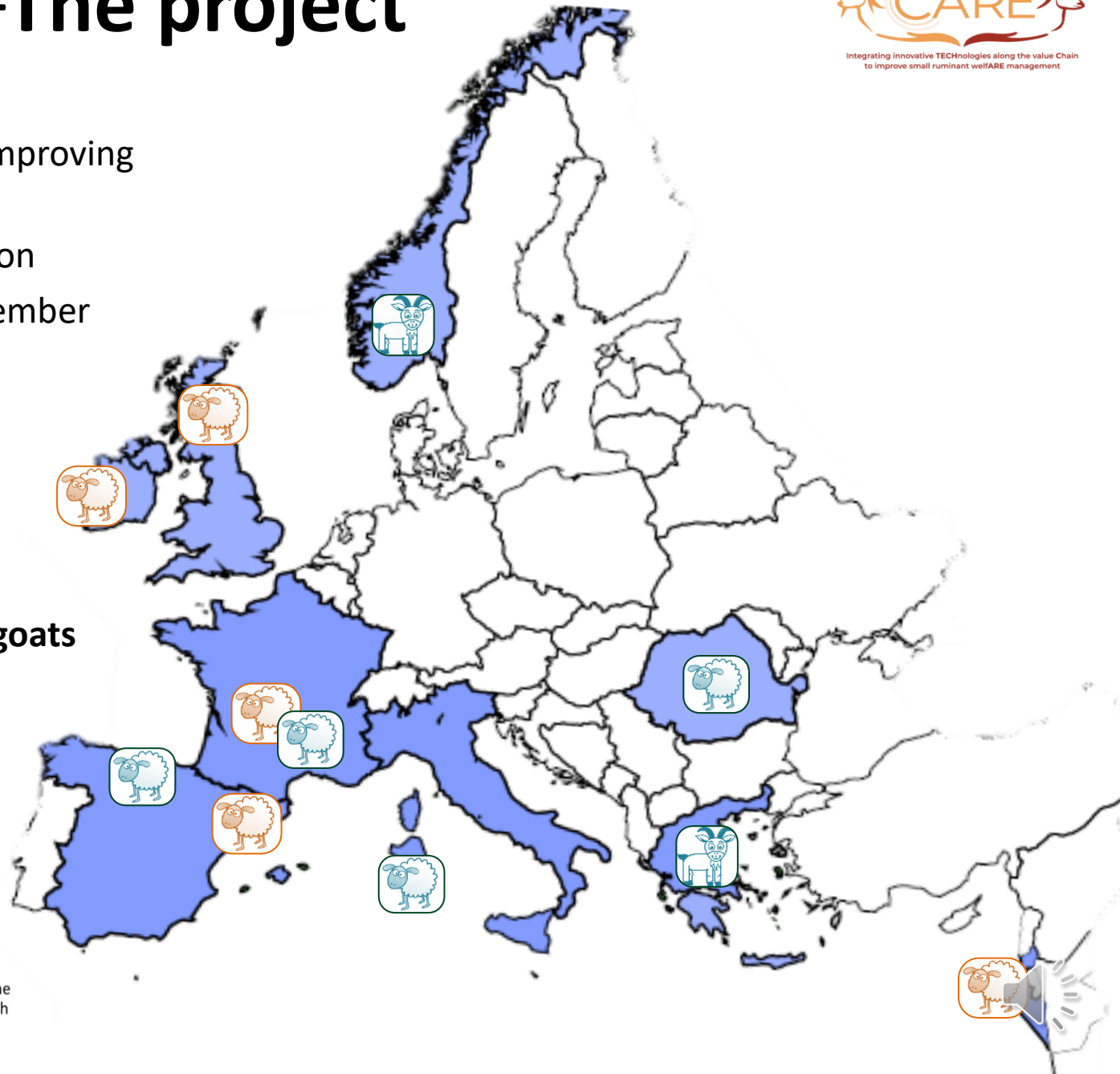
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***can we manage welfare in small ruminant systems using PLF?***



# TechCare –The project

- H2020-SFS-2019-1, Improving animal welfare
- Type: Innovative Action
- Starting date: 1 September 2020
- Duration: 48 months
  
- Focus on **sheep and goats farming systems**
  
- **9 countries**
- **19 partners**



# Consortium

## 9 countries, 19 partners

1. **UK:** 3 partners: SRUC, MRI, *Breedr Ltd*
2. **France:** 5 partners: Idele, INRAe, CNBL, Agdatahub, Page Up
3. **Italy:** 3 partners: Agris, EAAP, Abinsula
4. **Spain:** 2 partners: UAB, Oviaragon
5. **Israel:** 2 partners: ARO, Spark
6. **Romania:** 1 partner: BUAS
7. **Ireland:** 1 partner: Teagasc
8. **Norway:** 1 partner: NIBIO
9. **Greece:** 1 partner: HAO



# TechCare – Objectives

**To propose innovative and cost-effective technologies to improve welfare management in small ruminants:**

- With technologies adapted to small ruminant production
- By considering the whole production chain (from farmers to consumers and regulators)
- With adapted early warning systems
- Using appropriate business models



# TechCare – Steps & Outputs

## 5 key steps:

1. Prioritise welfare challenges and issues
2. Identify potential innovative technologies solutions
3. Validate the solutions in different and real conditions
4. Define appropriate business models
5. Communicate widely the results



# TechCare – Steps & Outputs

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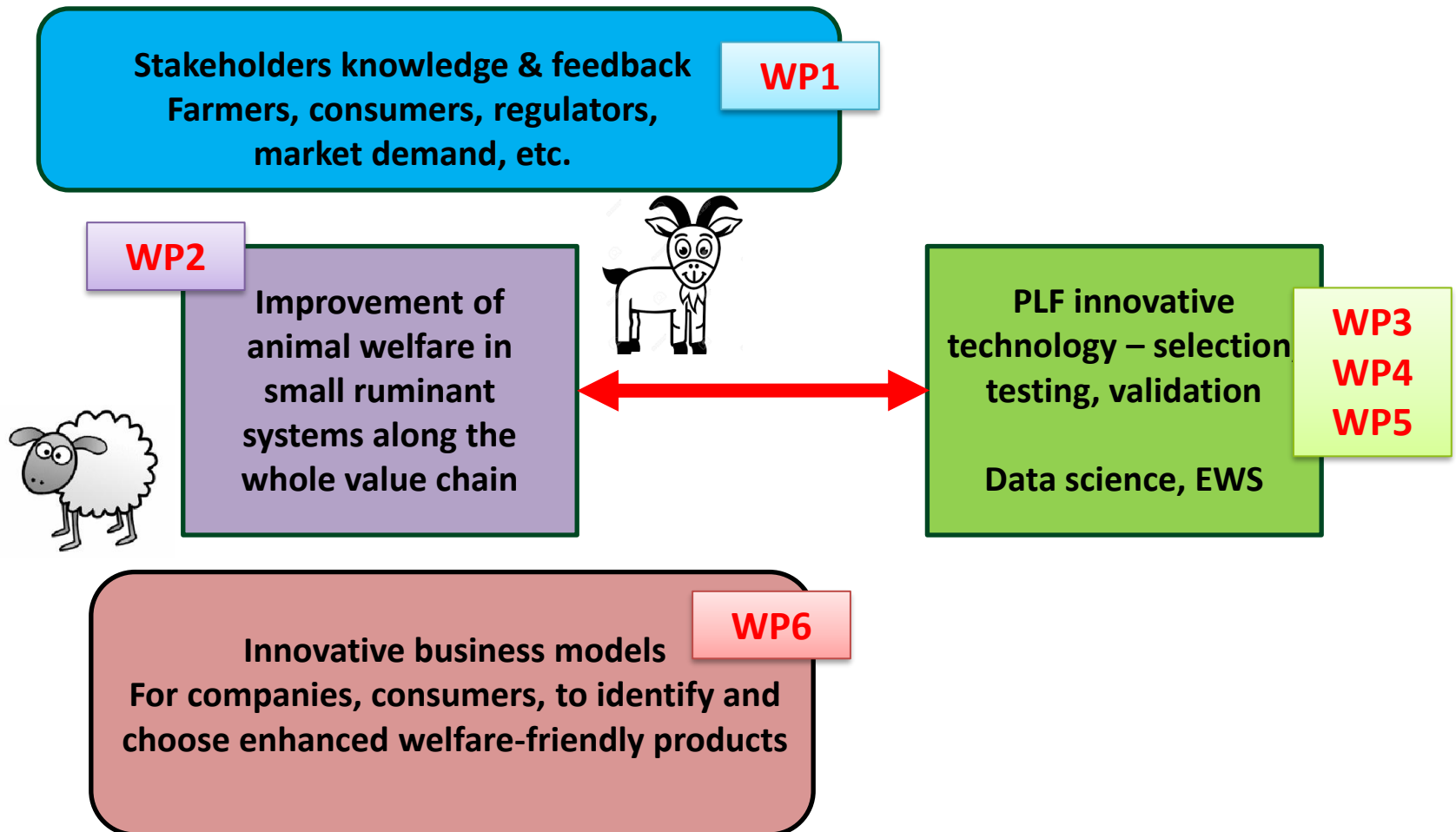
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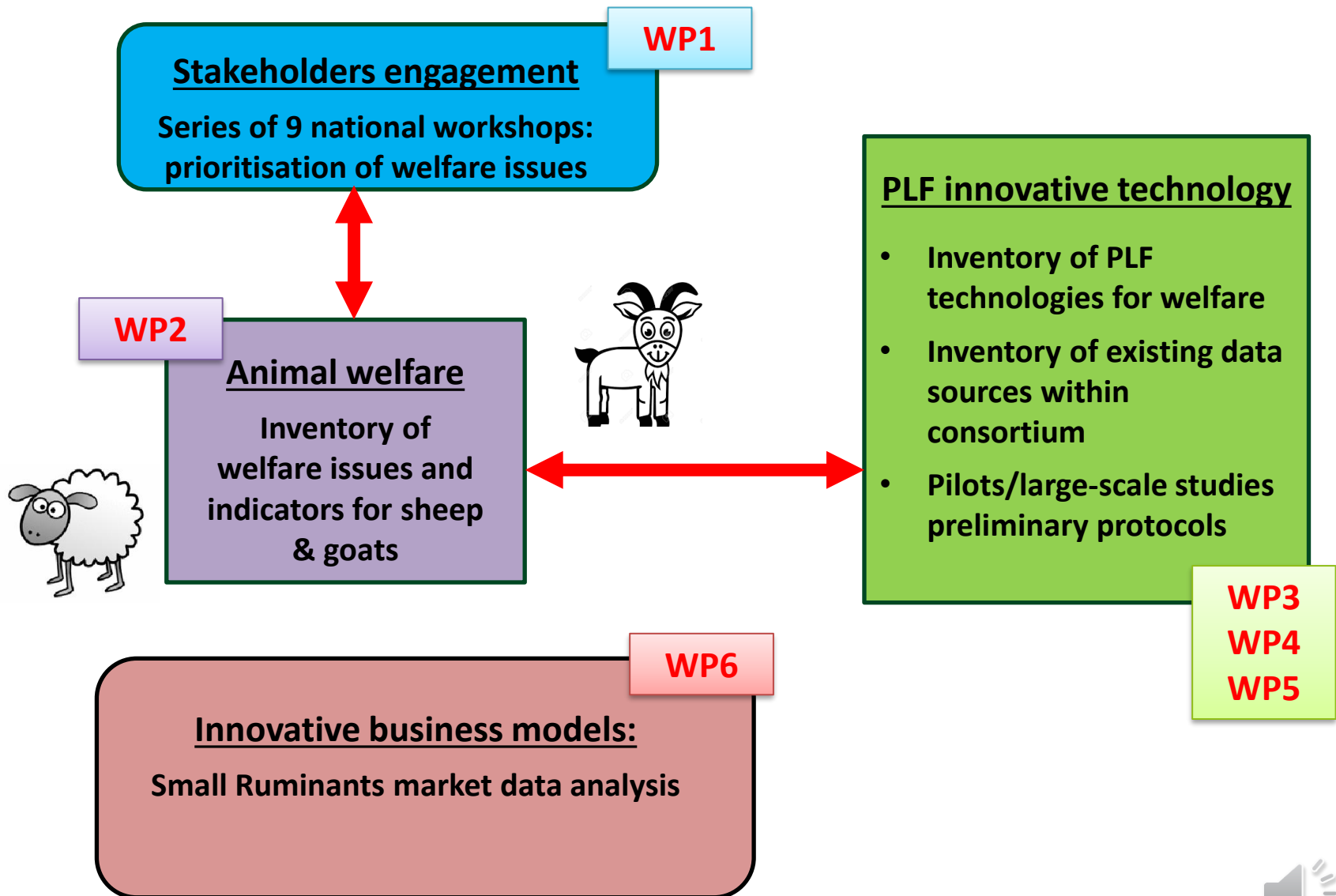
## 2 main outputs:

1. *Ready to use PLF solutions*
2. *Guidelines/blueprints for adapted solutions*

# TechCare –The WPs



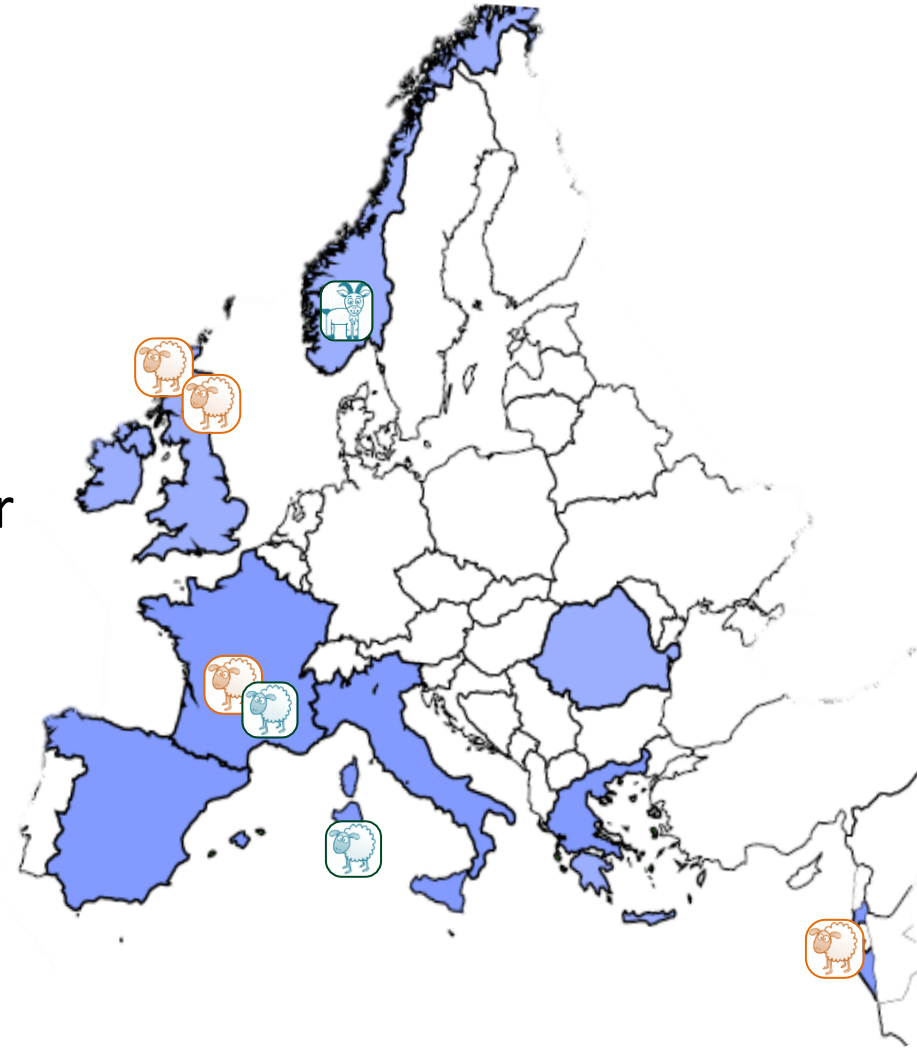
# TechCare – Activities so far



# TechCare – Next?

## Next year:

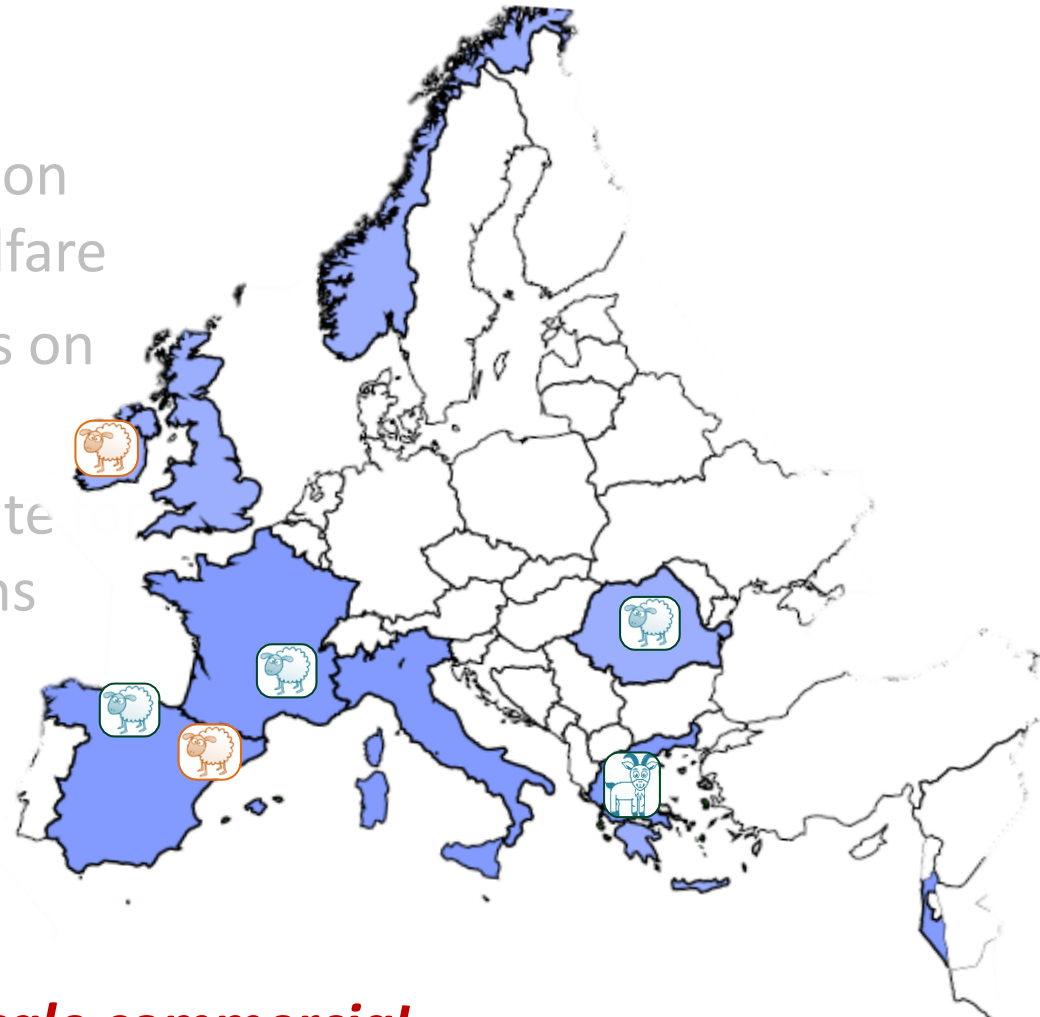
1. Stakeholders engagement on potential PLF tools for SR welfare
2. Testing of PLF technologies on pilot farms
3. Design models and template for data collection and algorithms
4. Start defining appropriate business models



# TechCare – Next?

## Next year:

1. Stakeholders engagement on potential PLF tools for SR welfare
2. Testing of PLF technologies on pilot farms
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***Then: deployment in large scale commercial farms of promising tools***



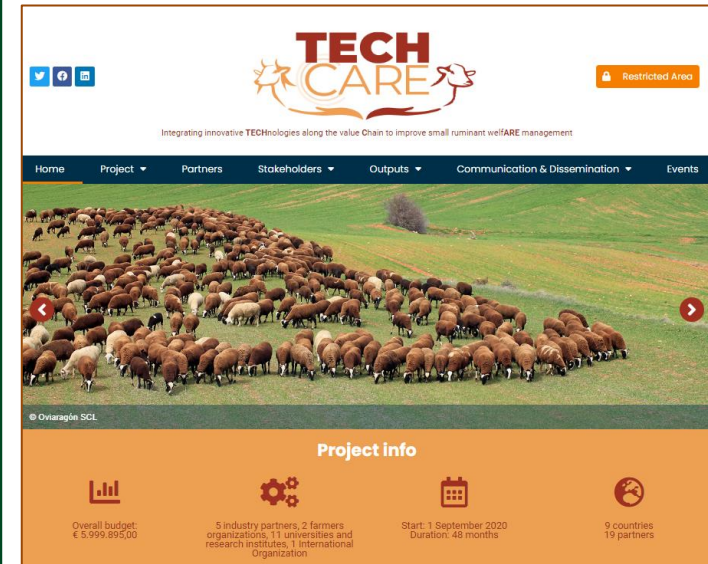
# Acknowledgments



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