ROMANIAN SHEEP FARMERS' WELFARE PRIORITIES AND THEIR KNOWLEDGE ON PRECISION LIVESTOCK FARMING

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1. Aim

The aim of this study was to prioritize the welfare issues of the dairy sheep industry in Romania, and to determine farmers' perceptions of precision livestock farming (PLF) approaches that could be applied to sheep welfare.

2. Materials and Methods

Data for welfare issues prioritization were collected during the 1st National Workshop of the TechCare project (https://techcare-project.eu/)

- Online meeting in April 2021
- OPERA method
- A list of 45 welfare issues was sent by email to 47 stakeholders 10 days before meeting
- 30 stakeholders from Romania: 23 farmers, 4 private vets, 3 academics

✓ Divided randomly in 3 groups

✓ Discussion and prioritization of the welfare issues within groups

✓ Reunite the groups and discussed the prioritized welfare issues to find the most important three

Sheep farmers received by email and/or WhatsApp a questionnaire to fill in regarding their knowledge/perception toward using PLF technologies in dairy sheep farms

- Along with questionnaires a file with definitions was sent
- A total of 14 valid responses returned from farmers, before the workshop

3. Results – welfare issues prioritization

The three groups of 10 stakeholders, plus a rapporteur for each group, had 45 minutes to discuss and prioritize the 45 dairy sheep welfare issues

Each group produced a list of main welfare issues

- Group 1 - 7 issues, Group 2 - 4 issues and Group 3 - 5 issues

Welfare issues	group1	group2	group3
Gastrointestinal parasites			
Lameness			
Mastitis			
Inadequate or contaminated water			
Respiratory infection			
Heat stress			
Malnutrition (diet imbalanced)			
Ectoparasites (mites, ticks, lice)			
Ectoparasites (myiasis)			

Group 1 considered all types of parasites (internal and external) to be equally important

Three welfare issues were common to all three groups:

✓ Gastrointestinal parasites

✓ Lameness

✓ Mastitis

4. Results – PLF perception

11 out of 14 farmers were aware of existence of indicators for animal welfare

9 out of 14 farmers were aware of using PLF approaches for welfare indicators

Out of 14 farmers

- 6 had no experience in using PLF technologies for welfare assessment and 6 have used occasionally
- 13 (93%) agreed that PLF would improve consumer knowledge of animal welfare
- 12 (86%) agreed that PLF should be promoted along the value chain
- 11 (78%) considered that PLF help to improve production efficiency
- 10 (71%) agreed that PLF enable effective increases in income and consumers would pay a higher price if they see the effects of PLF on the products
- 9 (64%) believed that PLF are technically easy to use in farm
- 7 (50%) knew few farmers that adopted PLF technologies, but the same number of farmers agreed that PLF is a good thing to do
- 7 (50%) agreed that current status of PLF technology is not suitable for most farmers, and the supply chain should be responsible for training farmers to use PLF
- 10 (71%) disagreed or were unsure that PLF technologies are too costly to implement
- 5 (36%) disagreed and 6 (43%) were unsure if the current policy provides incentives to support PLF implementation in farms

5. Conclusion

✓ Main welfare issues for Romanian dairy sheep industry are: gastrointestinal parasites, lameness, and mastitis

✓ Romanian dairy sheep farmers are positive toward the use of precision livestock farming technologies to manage the welfare issues