TECH CARE
Integrating innovative TECHnologies along the value Chain to improve small ruminant welfARE management

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AGRICULTURE & INNOVATION

To evaluate an early warning system, using PLF technologies, for potential welfare issues for lambs grazing pasture post weaning

Prime lamb production is an important farm enterprise and Ireland is the largest net exporter of sheep meat in the EU. Most lambs in Ireland are finished prior to the end of the grazing season, and peak slaughter occurs between August and November. The major health and welfare issues of lambs post weaning are internal parasites and lameness. Since 2010, all sheep in the EU are identified using electronic tags. Precision Livestock Farming is widely adopted in the management of high value animals. However, PLF solutions barely exist in the small ruminant sector due to a number of reasons including low animal value, cost of equipment, shortage of PLF solutions for small ruminants etc. The aim of this study is to develop an early warning system, using PLF technologies, for potential welfare issues (e.g. lameness) for lambs grazing pastures post weaning. The technologies been evaluated are weather station, and weather and environmental sensors; and weigh crate in conjunction with EID readers and EID tags. A total of 2051 lambs from 5 flocks, which are in 5 different counties in Ireland, are been weighed once every 2-3 weeks from weaning until been drafted for slaughter or until the end of the grazing season. The following assessments are been recorded for each individual animal at each weighing: body weight, dag score (5-point scale), locomotion score (3-point scale) and fleece condition. Also, a group fecal sample is collected at each weighing to determine fecal egg count. The data will be used to create algorithms for an early-warning system that predicts animal welfare issues for lambs grazing pasture from weaning until been drafted for slaughter.

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