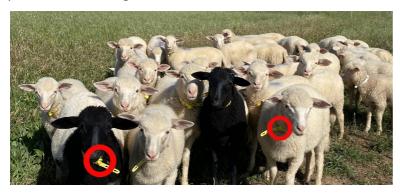# RFID Technology in Sheep Farming: Enhancing Monitoring and Management Efficiency

The use of RFID (Radio Frequency Identification) represents a key innovation in sheep farming, enabling precise monitoring and data collection for individual animals. This technology employs electronic devices,

such as ear tags or boluses, to assign a unique identification number to each animal, allowing accurate tracking throughout their lifecycle. At the Bonassai pilot farm (Italy), sheep older than six months are identified using RFID boluses (Datamars HDX, LF technology), while lambs younger than six months are fitted with collars equipped with microchips. The collar-based system, a novel solution developed by Agris, facilitates early identification of younger animals. To read animal IDs, various devices are employed: handheld readers, stick readers, and panel readers. These tools can integrate with farm

equipment like weighing scales, milking systems, and auto-drafting gates to link animal IDs with other parameters (live weight, milk yield, health data). The captured data can be stored locally or transmitted wirelessly for further analysis. The system requires careful management to ensure accuracy, including separating animals during data capture and minimizing device interference. For farmers, RFID technology significantly simplifies data collection, enabling timely and precise monitoring of individual animals. This supports informed decision-making, promotes better animal welfare through

prompt interventions, reduces labor requirements, and enhances productivity.