

Integration of new devices into existing animal recording and ICAR structures

Steven Sievert, Chair, ICAR Subcommittee for Recording and Sampling Devices

National DHIA/Quality Certification Services, P.O. Box 930399, 53593, Verona, WI, USA
jsievert@dhia.org

Summary

Traditional collection of data in milk recording programs relies on the use of milk meters or recording devices and their associated milk samplers; with analysis of milk components conducted at a centralized milk testing laboratory. ICAR has supported milk recording organizations and dairy producers in the collection of this data for daily management decisions and to deliver validated information for genetic evaluations. Supported by accurate prediction equations, the information provided has been integral in making data-driven management decisions on the dairy, valuable in research studies, and in making progress through genetic selection. As the technology on the dairy for collection continues to develop, there is also a need for ICAR to continually evaluate the recording guidelines for relevance and to meet today's need for accurate, rapid data collection. As ICAR members are encountering on-farm sensors and indicators which are not ICAR-tested or ICAR-certified, the validity of this data as a source of information for recording programs has been brought into question. While the information from these new sensors may be unqualified from the ICAR perspective with respect to accuracy, calibration or validation status, the information provided may be valuable to dairy producers for making day-to-day management decisions directly affecting animal health and may impact dairy profitability. The challenge that exists is the potential for this unqualified information stored in on-farm computers to enter central databases, either intentionally or unintentionally, without regard for accuracy or source of data tracking.

It is in the best interest of ICAR and its members to formally evaluate the suitability of sensor or indicator data for recording programs. The common perception that permeates the discussion of sensor data suitability is typically 'with more data points one does not have to be as accurate in the measurement.' While there are advantages of collection of additional observations using automated, on-farm sensors, caution needs to be exercised with respect to a blanket application of the statement. ICAR, through the work of the Subcommittee for Recording and Sampling Devices (RSD-SC) and the recently established Sensor Devices Task Force (SD-TF), recognizes the need to review the information provided by sensors and indicators for data suitability, develop guidelines for testing and certification of these devices, and provide direction to ICAR members and the recording industry for integration of this sensor data into the traditional recording programs that provide valuable information for on-farm management decisions and genetic evaluations. The SD-TF is a cooperative effort of the RSD-SC, ICAR Test Centres, the Milk Analysis Subcommittee (MA-SC), the Dairy Cattle Milk Recording Working Group (DCMR-WG) and supported by the ICAR staff and Board, and is committed to provide direction to ICAR members, dairy producers, and device manufacturers on the integration of new recording devices into existing ICAR structures.