

Update on development of validation criteria for sensor devices

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Summary

The ICAR Board has initiated a Sensor Devices Task Force (SD-TF) with the task to provide guidelines and methodology to help classify and qualify on-farm sensors and sensor data in relation to milk production. This to create better safeguards on their suitability for herd management and breeding decisions. In developing guidelines and establishing potential performance criteria for sensor devices it is essential to consider sensor measurements as part of a whole process towards decision making. It is the aimed at quality in decision making that should determine the required quality level in each of the preceding steps. Developing sensor validation criteria for possibly occurring situation requires to address questions like:

- o What is the trait?
- o What is the purpose of the sensor measurement?
- o What type of data does the sensor produce?
- o What is the anchor?
- o Single measurement or multiple measurements?

As part of this paper the approach and the challenges of the SD-TF are illustrated with an example on two different types of udder health monitoring devices.

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