The importance of farm systems thinking in animal recording

Quality phenotypes remain the foundation of animal improvement. But as we introduce more complex traits, especially those fertility and health traits that farmers manage at an individual cow level, the challenge of complete and accurate animal recording grows. Understanding what data on animal performance and farm management choices needs to be recorded, and how to treat this information in animal evaluation is a multi-discipline problem for farm systems researchers, physiologists and geneticists. This understanding will also inform the choice of herds for intensive and representative data collection as national systems move towards dedicated 'data herds' as the basis of animal evaluation. An example of these issues is provided from current New Zealand research into cow fertility.