

Animal and Bioscience Department

Title : OptiMIR: new tools for a more sustainable dairy sector.

Abstract:

NWE produces 60% of the EU milk which represents 13% of the turnover of the food industry in EU-27. OptiMIR aims to improve the sustainability of the dairy sector by providing milk producers with tools enabling them to manage the cows' fertility, feeding, health, pollutants, milk quality, etc. Milk records will be used in an innovative way: the entire MIR milk spectrum, including variations in its shape will be used as indicators of the cows' status for a range of characteristics:

1. To reduce the costs of production through improved daily herd management (e.g. costs of feeding with energetic balance indicator, veterinary costs with early diagnosis of mastitis, costs of semen straws with insemination predictor, etc.) The yearly potential saving on the costs is some €115/cow, giving \pm €530 Mio per year in NWE (see Appendix).
2. To bring opportunities to access competitive markets by measuring quality traits linked to higher added value (e.g. low-cost measure of food label claims).
3. To ameliorate impact on the environment (quantification of methane and nitrogen production).

Milk Recording Organizations (MROs) collect milk samples up to once a month from each cow for analysis. They will implement OptiMIR tools as a web-application on their data-processing system, and incorporate outcomes in their advisory services to farmers. Herd information will be automatically uploaded in the private web-account of milk producers providing them with management solutions to sustain their business.

EU dairy sector will improve its ability to resist crisis and fluctuating prices, and to adapt to the progressive increase of milk quotas until their abolition (2015). A sustainable dairy sector is mandatory for ensuring food self-sufficiency and controlling the safety of food chain. The safeguarding of farming activities leads to a decreased erosion of jobs, a strengthened social fabric and a conserved landscape in rural areas.

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