Online tools for optimization of herd management – recent developments for Austrian dairy farmers

M. Koblmüller[1], M. Mayerhofer[2], W. Obritzhauser[3], M. Wöckinger[4], K. Zottl[5], R. Weissensteiner[2] , B. Fuerst-Waltl[6], F. Steininger [2], C. Firth[3], C. Egger-Danner[2]

[1]LfL Upper Austria, Auf der Gugl 3, 4012 Linz, Austria
[2]ZuchtData EDV-Dienstleistungen GmbH, Dresdner Str. 89, 1200 Vienna, Austria,
[3]University of Veterinary Medicine Vienna, Veterinärplatz 1, 1210 Vienna, Austria,
4Chamber of Agriculture Upper Austria, Auf der Gugl 3, 4012 Linz, Austria
[5]LKV Österreich, Dresdner Str. 89, 1200 Vienna, Austria,
[6]University of Natural Resources and Life Sciences Vienna (BOKU), Gregor Mendel-Str.33, 1180 Vienna, Austria

Abstract

Continuing price pressures on milk, as well as consumer demands for quality products from healthy animals, result in increasing interest in novel traits for breeding programs but also for optimization of herd management to reduce costs. To facilitate improved herd management, easier access and compatibility of various data sources on farm and from external databases are of high priority for Austrian farmers. Recent research projects have focused on extended services for farmers to generate added value by linking a variety of external data sources. This includes extended health and treatment data, findings from laboratories, milk quality information from dairies and feeding information. These new online services will be based upon the cattle database (RDV) jointly owned by the Austrian and German performance recording organizations. At present, data on animal identification, performance recording, insemination, genetic evaluation, genomic tests for hereditary defects, slaughterhouse reports, veterinary diagnoses etc. are already directly available. Online services within the cattle database, "RDV-Portal", to date, include herd management and fodder ration optimization, a mating planner, support for marketing, an "App" for data recording, as well as the recent addition of special tools on health management for farmers and veterinarians.

A voluntary system of recording diagnoses was set up previously; the system has now been extended to monitor medicinal products used at animal level within the Austrian "Electronic Herdbook" project. The main aim of this initiative is to facilitate the electronic documentation of antibiotic treatments, as required by law. Another focus is on standardization and data exchange, as well as the elaboration of online tools for benchmarking. Within the ADDA (Advancement in Dairying in Austria) project, academic researchers, with representatives from performance recording, breeding and animal health organizations, the federal chambers of veterinarians and agriculture, as well as dairies and the Austrian Marketing Agency cooperate with respect to udder health. Strategies to reduce the use of antimicrobials, as well as an online tool for the economic evaluation of measures to improve udder health, are part of this project. Within EIP (European Innovation Partnership), an online calculator for various efficiency measures at animal and farm level is currently being developed. Recent improvements focusing on animal health are being developed together with farmers, veterinarians and experts from a variety of stakeholders. Once individual farmers have signed the relevant data protection agreements, their respective veterinarians and advisors can also be permitted access to the platform.

Further plans include the improvement of data exchange between data on farm (e.g. using sensors), the generation of added value by using MIR and improved data exchange in further areas.

Keywords: online service, herd management, health management, data exchange