

# Low Input dairy farming in Austria – Experiences from training courses and results of participating farmers

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Organic Low-Input dairy farming systems deliver multifunctional benefits to the society and the agricultural market, but technical and economic constraints still exist. To deliver an innovative toolbox of methods and knowledge contributing to the effectiveness of low-input dairy systems, training courses for farmers named (in German) "Low-Input Praktiker-Ausbildung" were started in 2015. Until 2018, about 160 participants took part in six one-year courses held in different regions of Austria. The transfer and exchange of knowledge and experience between farmers, advisors and researchers was the main goal of the training courses. The researchers and advisors stimulated active learning with discussions and the training course partners worked on integrated management solutions in the fields of feeding, housing, breeding, grassland management and economics. The participating farmers were given no strict guidelines regarding the speed and intensity of implementation of the low-input strategy. All farmers collected basic production and economic data according to the methodology of the Austrian dairy cattle network (Arbeitskreis Milchproduktion). Each course included four two-day modules where different topics were discussed indoors and additionally on low-input pilot farms (feeding – breeding; animal housing – welfare, grassland management – grazing, economics – socio-economics). After each meeting consultants supervised

further "regional small group meetings" (stable schools) on different project farms.

100% of farmers rated the training courses as "very good" or "good". Especially the intensive exchange of practical experience between the training course partners was appreciated. The current economic evaluation results show that the following aspects are particularly important key factors for the economic success of the low-input strategy: 1) feeding cost reduction through high forage quality during lactation, 2) optimal grassland and grazing management, 3) efficient concentrate and fertilizer input, 4) low-input adapted and fertile cows, 5) high milk quality and a sufficient milk yield and 6) possibility to market the milk within premium programs. In 2017, the marginal income differed between 2,819 and 1,613 € per cow and between 43.9 and 32.7 Cent per kg milk between the upper and lower quartile of the evaluated organic low-input farms, respectively. In conclusion, optimal and site-adjusted low-input strategies offer a basis for a sustainable organic dairying in Austria. Equally to experience from other countries it was demonstrated that participatory, on farm projects are powerful tools for agricultural development and knowledge transfer.