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Comparison of the Economic Performance between Organic and Conventional Dairy Farms in the Swiss Mountain Region Using Matching and Stochastic Frontier Analysis

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This thesis evaluates and compares the economic performance across organic and conventional dairy farms in the Swiss mountain region. To mitigate possible self-selection bias, matched groups of organic and conventional dairy farms with similar production possibilities are determined using exact and propensity score matching. Stochastic frontier analysis is then applied to estimate productivity differentials and technical efficiencies. Results reveal that organic farms are more productive converting input (labour, land, intermediate costs, capital) into output (revenues) while there are no significant differences in technical efficiencies. These findings suggest that the organic milk price overcompensates for lower yields in organic production leading to higher incomes. Thus switching into organic farming in the low intensive mountain region can improve the economic situation of conventional dairy farmers.

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