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## Assessment of the production of goat milk by means of performance cost accounting in terms of economic efficiency and influence of stock size

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## Abstract:

**Purpose:** To evaluate the performance and costs of goat milk production, if it is economical, and whether animal places has an influence on performance cost accounting.

**Methods:** We modelled three production processes of dairy goat farming. These only differed in stock size with the area per animal kept constant. This resulted in 125, 245, and 490 animal place. We also kept the production characteristics constant. With these assumptions, a performance-cost calculation was carried out. It included a list of performance and direct costs, investment requirements and annual building costs, operating costs and performances, costs and success factors. The data we use are from our own data collection and research.

**Results:** Animal places had no influence on the direct costs and direct cost free performance. However, animal places had an impact on variable costs. These increase with a decrease in animal places and thus decrease the profit margin. Direct and operating free and single-free performance increase with increasing animal places. In the same way, the operating productivity increases and the unit costs are positively affected while the price per litre goat milk decreases. For all three scenarios, the gross margin was still positive, but the direct and operating cost free and individual cost free performance was negative.

**Conclusion:** All three models of production processes turned out as non-economical. To cover all costs, the milk price of  $\in$  0.75 per litre would have to increase by around 50 % in the largest barn. To increase profitability, direct marketing of goat's milk products could be added to milk production. Good kid marketing would also increase profitability.

**Relevance:** We were able to show which economic variables in the performance and cost calculation arise for the farmer in goat milk production, whether it is economical in the planning examples and where there is room for improvement.