

Vlaamse Vereniging voor Veterinaire Epidemiologie en Economie

Title:	Relation between dairy goat welfare, management practices and productivity in organic farms
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Title:	RELATION BETWEEN DAIRY GOAT WELFARE, MANAGEMENT PRACTICES AND PRODUCTIVITY IN ORGANIC FARMS
Category:	selected as oral presentation

The dairy goat sector in Flanders & the Netherlands has grown substantially during the last years. Contrary to cattle, pig and poultry production, guidelines and good practice advice are rare in this sector. Dairy goats farmers are interested in optimising their profitability and animal management strategies. Additionally, guidelines are needed to safeguard animal welfare.

A dairy goat welfare protocol was developed and carried out on 16 organic dairy goat herds in Belgium and the Netherlands. Additionally, an economic analysis of these herds was performed in order to study the relation between welfare parameters, management practices and economic outcomes.

Results showed that a higher number of goats per herd was related to a lower surface area available per animal $(r^2=0.65)$. A higher number of goats was associated with a higher frequency of negative goat behaviour $(r^2=0.52)$, defined as intra-group aggression and licking and mouthing of bars, walls and gates.

A decrease in available space per animal was associated with a significant increase in the amount of milk produced per full-time equivalent worker (FTE) (r²=0.62). There was no significant correlation between space per animal and average milk production per goat of a herd.

An increasing number of goats per FTE (r^2 =0.65), as well as a lower labour cost per herd (r^2 =-0.61) and a higher milk production per FTE (r^2 =0.68), correlated significantly with a higher number of lesions per animal. The more positive behaviour shown by the animals, defined as browsing, playing, sleeping, ruminating, laying down, eating and drinking, the higher the farmer scored his job satisfaction (r^2 =0.57). The more positive behaviour was observed in the animals, the higher was the average milk production per animal (r^2 =0.58).

Given the high heterogeneity among organic goat farms, generalisations need to be made with caution. Nevertheless, the correlations between animal welfare and productivity, as well as between animal and farmer welfare, were clear and relevant to both the organic as well as conventional goat sector. In organic dairy goat production, at least 1.5m²surface area is legally required per lactating animal. By increasing the number of goats per herd many farmers approach this minimal norm. In conventional dairy goat farming, it is common practice to provide less space (1 m²) per lactating goat and we expect more compromised welfare at these higher densities.

