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## Characterisation of Goat Milk Industry in the North and Oases Region of Morocco

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## Abstract

In North of Morocco and oases regions of Ouarzazate and Errachidia, the dairy industry is growing significantly consequence of development programmes implemented by public authorities. Besides, and according to the results of experiences in Morocco and other Mediterranean countries, the valorisation of goat milk by cheese making seems to ensure a better profitability of dairy goat production, and constitutes a motor for its development.

In order to characterise this sector in these two areas, this study aims to characterise the local expertise in goat milk processing, the physical and chemical characteristics, and the hygienic quality of local goat milk. To meet these objectives, data on milk processing were collected from dairies in oases region and in the north, and a sampling schedule of goat milk and cheese was adopted during 9 months, with 92 samples in total.

The transformation of milk is oriented mainly toward the production of fresh cheese; the major steps are: reception, filtration, thermisation or pasteurisation, coagulation (commercial rennet), moulding and draining, salting and conditioning. Four categories of processes, depending on modalities of coagulation, were identified in north and one category in south, with a respective cheese yield of 19% and 18.5%.

This transformation remains traditional, seasonal and badly conducted; micro-organisms indicating the level of hygiene were high, and several cheeses failed the standards laid down by the Moroccan legislation. The obtained values of physical and chemical characteristics of goat milk in both regions were relatively similar, with minim-superiority of milk in the oases region concerning dry matters (14,49 vs. 13,38%), ashes (0,75 vs. 0,67%) and fat content (4,53 vs. 3,58%) and in the north for proteins (3,54 vs. 3,98%).

Taking account of these results, the chemical composition of milk in the two regions seems to assure a better cheese production (quality and quantity), if the process of manufacture will be well mastered in different steps.

Keywords: Cheese, goat, milk, Morocco

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