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Milk Yield and Lactation Management of Goats kept by Gabra and Rendille Pastoralists in Northern Kenya

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Abstract

Although meat production is the main function of small ruminants in African pastoral systems, especially goats are also an important source of milk in these systems. Therefore a study was carried out to assess the milk yield of does that are kept by the Gabra and Rendille pastoralists, both during wet and dry seasons. Sampling took place from June to November, 2006. For each goat a single test day sample was taken, and the lactation month recorded. Milk was measured in 230 and 268 randomly selected does in goat populations of Gabra and Rendille, respectively. Daily milk yield per doe was estimated by measuring the milk of half udder after 10 hours of does separation from their kids. The amount obtained was multiplied by 4, since goats are milked twice a day. The practices of the pastoral communities relating lactation management were also determined using focus group discussions. Gabra and Rendille keep lactating goats in both homestead and satellite flocks. The results show that in both seasons the milk yield of does kept in the homestead flocks is significantly higher than of the ones kept in the satellite flocks (Gabra: Wet - Home (WH) 621ml (n=47), Wet - Satellite (WS) 261ml (n=78), Rendille: WH 486ml (n=19), WS 114ml (n=53)). Since fodder conditions are better around the satellite, thus the results indicate that pastoralists select the higher yielding animals to be kept in the homestead flocks for supplying milk to the household. Milk yield of Gabra goats was significantly higher than that of Rendille goats during the wet season in both flock types, and during the dry season only in the homestead flocks. The Gabra and Rendille pastoralists manage the lactation of their does by both routine and problem solving measures, which include for example separation of bucks from the homestead flocks to prolong the lactation period and migration of animals to areas of higher feed availability, respectively. The ability of the does in the two goat populations to resume production immediately after a drought period, and maintaining milk yield during the dry season demonstrate their high productive adaptability.

Keywords: Adaptability, goats, management, milk, pastoralists, productive, season, yield