Use of Castration in genetic flock improvement in goats, Capra hircus, in Gombe, Nigeria, West Africa

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Abstract

The study was conducted to determine the extent to which castration is being used as a support tool for genetic improvement of goats among flock owners. A single stage cluster sampling was conducted among available goat breed in the study area. The Red Sokoto breed was the only breed found to be reared. The average flock size ranged from 7.82±0.29 to 8.36±0.45 individuals in Herwagana and Kumbiya-kumbiya wards respectively. With the exception of intact males, the wards did not differ significantly for all other subclasses of flock. Out of the 83 castrations recorded, 62 (74.7%) were conducted during the early rainy season while 21 (25.3%) were done in the late rainy season. The age at castration ranged from 4-7 months. All the 200 flock owners surveyed agreed to have practiced castration. Majority of the flock owners surveyed (94%) were ignorant of genetic improvement of flock while only a few (6%) were aware. Of the latter, 7(58.3%) had informal knowledge about controlled breeding, 3(25%) got their awareness from extension agents and 1(8.3%) each heard from the media and seminar. A large proportion of the respondents did not consider quality of bucks or prevention of inbreeding as reason for castration. Rather, reduction of goaty smell of meat, improvement of carcass quality, increase in weight and temperament control were the their major reasons. The study has shown that genetic improvement of flocks by castration of inferior bucks or closely related males is not popular among farmers in Gombe metropolis. There is therefore the need to educate flock owners to consider the bucks quality and level of inbreeding in their flocks before castration. This is to avoid the loss of desirable genetic materials or the passing of undesirable genes or the consequences of inbreeding, such as poor growth, reduced fertility or genetic defects.

Keywords: Breeding, Goat, Castration, Flock

Contribution of Study

The study has shown that knowledge of genetic improvement of flocks by castration of inferior bucks or closely related males is an important aspect of livestock management practices that should be extended to small and large scale livestock owners. This will assist greatly in enhancing livestock production especially in rural areas of developing countries.