ABSTRACT

In 2006, the government of Rwanda started “One cow program” whereby a dairy cow is given to a poor family in order improve household nutrition and incomes through milk consumption and sell of extra milk. To document the productive and reproductive performance of cows owned by beneficiaries of “One cow program” and to compare with those owned by non-beneficiaries, data was collected in 5 sectors of Gicumbi District, Northern Rwanda. A total of 400 farmers (300 beneficiaries and 100 non-beneficiaries) were randomly selected and interviewed using a semi-structured questionnaire. The data collected included milk yields per day, lactation length, age at first calving, calving interval, conception rates, breeding system and feeding.

Results showed that the mean daily milk yield per cow and lactation length were 5.8±2.89 and 7.7±3.02 litres and 9.4±1.9 and 10.3±1.6 months for the beneficiaries and non-beneficiaries respectively. The mean age at first calving were 31.6±3.9 and 30.8±3.2 months while the mean calving interval was 18.3±4.5 and 14.3±2.7 months for cows belonging to beneficiaries and non-beneficiaries respectively. Conceptions rates of cows at first and second services were 57.3 and 76.4% for beneficiaries and 58.6 and 85.9% for non-beneficiaries. 64.0% of beneficiaries preferred natural service for their cows while it was 29% of non-beneficiaries. Napier grass and crop by products were the preferred cattle feeds by 72% of beneficiaries and by of 57% non-beneficiaries. Supplementation was practiced by 12.7% of beneficiaries and 30% of non-beneficiaries.

It was concluded that the productive performance of cows given to beneficiaries was low compared with those of non-beneficiaries within the same locality and this was attributed to poor quality of feeds used by beneficiaries and high cost of supplements. The poor reproductive performance was attributed to inferior feeding and knowledge on fertility management by beneficiaries.

Key words: Dairy cow, Milk yield, Age at First Calving, Breeding system, Feeding.