

Abstract

Inadequate nutrition is a major constraint that impact negatively on the growth and viability of dairy cattle farming in Kenya. A study was carried out to assess feeding practices, feed availability and coping strategies among smallholder dairy farmers in semi-arid region of Eastern Kenya. A total of 136 dairy cattle farmers were interviewed between June - August 2008 using a structured questionnaire.

The study revealed that animals depended on natural pastures and home-grown fodders, mainly Napier grass and crop residues. Maize stover was the principal crop residue and was the main livestock feed during the peak of long dry season with >80% of farmers using it to feed their dairy cattle. Between 88 and 92% of farmers provided supplements inform of dairy meal concentrates to the lactating cows but the quantity was low and amount fixed (usually about 2 kg/day) throughout the lactation period and not commensurate with milk production. Majority (97.5%) of the dairy farmers interviewed practised some form of feed conservation. Grass hay was the most popular form of feed conserved but the quality was poor and quantity stored was inadequate to sustain the dairy herd kept during the dry season. Approximately 95% of dairy farmers stored crop residues for their livestock but the storage methods were inappropriate to maintain the quality. About 93% of farmers experienced seasonal fluctuation of feed availability with highest number (70-80%) reporting peak severe feed shortage in September and October. Feeding conserved fodders to dairy cattle was the most important strategy adopted by smallholder farmers to mitigate against feed scarcity followed by purchase of fodders from other farmers. To improve feed availability, farmers should maximize conservation of surplus feed resources experienced during wet seasons using simple and cost effective methods such as hay box for making hay and polythene tubes for silage.