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Characterizing Stratified Cattle Production as Option for Enhancing Market Outlet for Lean Animals from Pastoral Areas of Kenya

BULLE HALLO DABASSO¹, OLIVER WASONGA², PATRICK IRUNGU³, BRIGITTE KAUFMANN²

¹*University of Nairobi, Land Resource Management and Agriculture Technology, Kenya*

²*German Institute for Tropical and Subtropical Agriculture (DITSL), Germany*

³*University of Nairobi, Dept. of Agricultural Economics, Kenya*

Abstract

Economic potential of cattle production in pastoral areas of Kenya is constrained by limited market outlet for lean animals especially during dry seasons. Since the year 1999/2000, when a severe drought was experienced, there has been an emergence of stratified forms of cattle production in which the lean animals are purchased from the pastoral areas for fattening in areas having comparative production advantage. We aim at understanding the characteristics of the stratified forms as option to improve market outlet for the lean animals. Qualitative data was collected using semi-structured questionnaire from purposively selected informants ($n = 34$) in Narok, Taita Taveta and Laikipia areas. Data was coded in the frame of a content-analysis to determine the existing forms of stratified production and their management operations for risks minimisation. We found stratified forms practised on private ranches, leased ranches and smallholder farms, which are undertaken by ranchers, traders, and agro-pastoralists respectively, and differed in their strategy for accessing grazing resources, herd sizes and fattening period. A number of strategies are followed to minimise risks, including purchasing during dry seasons when the livestock prices are low, use of agents to source animals, early sale of slow growing animals and partnership with others. We then, collected data on individual animal weights at purchase, weights at sale, purchase and production costs, for a period of fifteen months from five ranchers ($n = 683$), two traders ($n = 240$) and nine agro-pastoralists ($n = 140$) to determine daily animal weight gains and net revenues per animal (mean \pm stand error). Daily animal weight gain of 0.24 ± 0.1 kg, 0.40 ± 0.0 kg and 0.24 ± 0.0 kg were observed for ranchers, traders and agro-pastoralists respectively. Net revenues per animal were $\$58 \pm 3.0$ for ranchers, $\$79 \pm 2.9$ for traders and $\$55 \pm 3.1$ for agro-pastoralists. The study revealed characteristics of stratified forms of cattle production in terms of management operations, animal weight gains and net revenues as potential option to enhance market outlet for the lean animals from pastoral areas of Kenya.

Keywords: Drylands, fattening, lean animals, marketing, pastoral areas, profitability