



Tropentag, September 15-17, 2021, hybrid conference

“Towards shifting paradigms in agriculture
for a healthy and sustainable future”

Camel Milk Market Structure in the Arid and Semi-arid North Eastern Kenya

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Abstract

Camel milk enterprise is crucial to cash incomes, rural employment and food and nutrition security among pastoral communities in the arid and semi-arid North-Eastern Kenya. Despite evidence for the growing demand for camel milk outside the pastoral population and interventions to promote the value chain through trader cooperatives, the enterprise is still characterised by low quality and marketed volumes, losses and inadequate access to the end market and price. Although the intermediaries provide a crucial market linkage due to the nature of the production system, the significant variation in size and scale can be interpreted as a source of inefficiency. This study investigated the features that characterise and determine competition between traders operating in the same market by computing the Gini coefficient and Lorenz curve for the milk business in the year 2019. Random cross-sectional data on trader and trading enterprise characteristics, operating and marketing costs were collected from 135 camel milk producers and 193 camel milk traders in Isiolo County Kenya. The Gini coefficient showed a concentration ratio of 0.49 indicating an uneven spread of market share. The Lorenz curve of the income of traders under cooperative dominated and lied above individual operation indicating less inequality in income distribution compared to individual trade. Generalized Lorenz dominance also showed that cooperative trade is superior from a welfare perspective. The presence of large and small traders in the market is therefore a source of market inefficiency. An analysis of prospective policies is therefore necessary to minimise the economic effects of non-cooperation.

Keywords: Cooperative, inefficiency, Intermediation, Lorenz, Market, welfare