



Evaluation of cow milk production efficiency in eastern central highlands of Kenya (Proposed graduate research study)

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ABSTRACT

Dairy cattle production is a major economic activity in Kenya contributing 3.5% of the national gross domestic product (GDP), and income, employment and food to many small-scale farmers. The country's dairy herd size is the biggest in sub-Saharan Africa. Kenya enjoys preferential market access for its products in the eastern and southern Africa region. However, the country's milk consumption level is low, at 76Kg per capita against the World Health Organization's recommendation of 210Kg. Kenya's milk has also not managed to capture substantial markets beyond its borders; a situation that is partly related to the nation's comparatively low per cow average daily production of 6Kg and unsustainably high cost of production. These constraints can be addressed by analyzing the milk production efficiency, especially the technical and cost efficiency aspects, to identify areas to target for improvement.



The objective of this proposed study is to assess and document the technical and cost efficiencies of farmers in the leading dairy farming region of Eastern central highlands of Kenya. The efficiency levels determined will be related to the farm gate price of milk and ultimately to the demand of milk or milk products by consumers. The study has been motivated by concerns raised by stakeholders and particularly policy makers regarding the country's inability to produce milk that is more affordable locally and also to sustainably penetrate the external market based on cost leadership.

Primary data will be collected through questionnaires administered to sampled dairy cattle farmers during a cross-sectional survey. . Further primary data will be collected from identified respondents representing other stakeholders as guided by a pre-developed interview checklist for each of them. Secondary data will be collected from reports and journals relevant to the study. The sample size will be derived using the Fischer's formula while the respondents will be selected with the help of extensionists and a computer program.

The information generated through this study will contribute to improved efficiency and competitiveness of the dairy sector in Kenya.

Key words: Technical efficiency, cost efficiency, cost leadership, per capita consumption