

Research Application Summary

Assessment of economic and socio-economic factors affecting the demand for goats and goat meat in Malawi

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Abstract

The general objective of this study is to assess the economic and socio-demographic factors affecting the demand for goats and goat meat in Malawi. Specifically, the project will: determine the levels of demand of goats and goat meat in urban and rural areas of Malawi; determine the major economic and socio-demographic factors affecting the demand of goat and goat meat in the various agro-geographic or regional locations of Malawi; and evaluate consumers response with respect to price changes of goats and goat meat relative to beef and potential effect of changing some of the factors affecting the demand.

Key words: Demand, goat meat, socio-demographic factors

Résumé

L'objectif général de cette étude est d'évaluer les facteurs économiques et socio-démographiques qui influent sur la demande des chèvres et de la viande de chèvre au Malawi. D'une manière spéciale, le projet déterminera les niveaux de la demande des chèvres et de la viande de chèvre dans les milieux urbains et ruraux du Malawi, déterminera les principaux facteurs économiques et socio-démographiques qui influent sur la demande des chèvres et de la viande de chèvre dans les divers endroits agro-géographiques ou régionales du Malawi, et évaluera la réponse des consommateurs à l'égard des changements des prix des chèvres et de la viande de chèvre par rapport au bœuf et l'effet potentiel de changer certains facteurs qui influent sur la demande.

Mots clés: Demande, viande de chèvre, facteurs socio-démographiques

Background

Goat populations have increased above those of other livestock in Malawi. However, the per capita consumption of goat meat is still low and the demand for goat meat is mostly seasonal. Information about the demand for goats would thus be useful in developing effective production programmes that will reduce the imbalance between goat meat production and consumption/

demand thus ensuring sustainable food supplies and hence contributing to food security. This would also assist policy and decision makers at national level in allocation of development resources that would assist in economic growth of the country and contribute to poverty alleviation/reduction.

Literature Summary

The demand for goat meat is very seasonal being particularly high during religious festivals and cultural celebrations as well as during hunger months. The problem is that although the growth rate of the goat population has been very high, the increases in live and carcass weights have been low, averaging about 1.7 and 0.11% per annum, respectively. Goats and goat meat are seen on the markets during market days and throughout the year (Banda, 1990; Banda *et al.*, 1990; Banda, 1992; Banda, 1998a, b; EU-STD3/Malawi Project, 1998; Banda, 2000; Banda and Sichinga, 2001). However, despite some concern about goat productivity, little information exists on the demand parameters.

Study Description

Detailed market surveys encompassing goat meat value chain analysis will be conducted in markets in urban, peri-urban and rural areas of Malawi, in as many agricultural Development Divisions (ADDs) or regional locations of Malawi as possible as major areas of the study to stratify for agro-ecological zones. Economic and socio-demographic factors (income, age, household size) will also be assessed at this stage. Data for determination of market efficiency of various channels used will be collected. In addition, data will be collected on various channels and marketing efficiencies calculated for each.

Aggregate time series data will be collected from literature sources such as from the National Statistical Office, Ministry of Agriculture and Irrigation (Planning Section), Department of Animal Health and Industry and other informal unpublished sources. This will take about 2 months. Using existing literature and information that has been generated by various institutions over a period, demand models that will include factors such as population, income, price of the meat and beef or other substituting commodities and socio-cultural factors such as preferences and tastes, food preparation methods, will be developed. This formulation will take into account the possible or potential size variances that will likely be contributed by each factor.

The factors in models will then be streamlined to those that can easily be measured in the field to determine demand for goat

meat. Various factors will be tested in determining potential demand for goat and goat meat. The functional form of the model will be $C_{gmt} = f(P_{gmt}, P_{bt}, Y_t, U)$ Where; C_{gmt} is the per capita consumption of goat meat in time t ; P_{gmt} is the price of goat meat in time t (in Malawi Kwacha); Y_t is the income per capita in time t ; P_{bt} is the price of beef in time t (in Malawi Kwacha). Linear, semi-logarithmic and double-logarithmic forms of this model will be tested and the best selected for estimating demand for goat meat in Malawi. Price and income elasticities will be estimated from the various forms of functions at mean values of the variables.

Data will be analysed using SPSS to generate frequencies and means for most of the household and market surveys. Some of the coefficients obtained from the preliminary market and household analysis will be used to feed into the demand model developed above. The survey will also assist in determining the economic and socio-demographic factors affecting demand for goats and goat meat. Trends, categorisations, elasticities and significance levels of the various variables or coefficients such as demand levels and marketing levels and prices etc. will be derived. Appropriate policy strategies and recommendations for goat development in the country will be derived and communicated to the Ministry of Agriculture and Irrigation and other stakeholders.

Research Application

The research will help uncover factors that influence people's decision to buy or not to buy goat meat. This will help policy makers in designing appropriate programs that will enhance marketing of goats to improve income for goat farmers and also increase the per capita consumption of goat meat. Appropriate policy recommendations for the goat development sector will be made.

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Masangano, J.C.

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