Geographical Certification as Production and Commercialisation Strategy for Smallholder Sheep Farming in Ceará, Brazil

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Abstract

Producing high quality sheep meat under a geographical certification label has been suggested as alternative production and marketing strategy for Brazilian smallholder farmers. Under certain frame conditions such protections may contribute to rural development by enabling the farmers to remain competitive. Within the framework of a broader study of the Embrapa Caprinos (Brazilian National Corporation for Research on Plant and Livestock Husbandry, section for small ruminants) on supporting sheep farming by the certification of their products, this study is aimed at the characterisation of smallholder sheep farming in Ceará (Northeast of Brazil) and the identification of the production chain of salted, dried sheep meat ('Manta de Tauá'). Information from previously conducted standardised interviews with 129 sheep producers in the Tauá municipality on their socio-economic conditions, production techniques and commercialisation characteristics is classified into different farming systems. The variables for the multivariate data analysis are reduced applying multiple correspondence analysis followed by a non-hierarchical cluster analysis based on k-means. The clusters are tested for differences in socio-economic aspects including income sources and resource allocation, sheep production techniques and levels, and commercialisation strategies for live sheep or sheep products. In each cluster 20 % of the farmers are randomly sampled and a profit margin analysis of the sheep production based on additional in-depths interviews is undertaken. To describe the production chain of the dried meat, interviews with retailers and processors follow up the farmer information. The marketing channels of the sheep meat are mapped using GIS (Global Information System). The economic analysis of sheep production by the different farm types complements the specific information on their production techniques and socio-economic frame conditions. The overview about the existing local marketing networks serves as applicable information for the development of the quality chain and thus the certification process. Identified restrictions and opportunities of the current production allow predicting whether the farmers belonging to the different clusters can profit from the certification concept in sheep production or not.

Keywords: Brazil, cluster analysis, geographical certification, sheep farming

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