

114. Evolution and dynamic of the goat population in Brazil between 1975 and 2003

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This study was proposed to analyze the dynamic of goat production in Brazil, considering the evolution of livestock during the period of 1975 to 2003. The spatial dynamic of goat activity in Brazil was analyzed and evaluated, through the following indexes: asymmetry, concentration and distance, and the use of the center of gravity. The data analyzed was from the Instituto Brasileiro de Geografia e Estatística (IBGE). The analysis was performed following the methodology of ordering micro-regions; frequency distribution; asymmetry of frequency distribution; concentration measures; distance with geographic entities; agreement coefficient and the center of gravity. An increase of 35% in the Brazilian goat livestock was observed. In terms of regional dynamic, the results didn't show reverse in the relative participation of the regions concerning the goat livestock. The Northeast region concentrates 93% of the total goat livestock in Brazil. The number of micro-regions with the presence of goats increased from 531 to 552 between 1975 and 2003. The biggest spatial changes, measured by Cantor and trans-variation distances, happened between 1975 and 2003. The micro-region of Juazeiro in Bahia state had 17.6% of the Brazilian goat livestock. Also, less than 25% of the micro-regions that had goats were enough to gather almost 75% of the goat livestock. In 1975, the micro-region of Petrolina, in Pernambuco state, presented the higher density of goats by square meters in Brazil, but was losing importance, and in 2003, finished in tenth position, losing the first place for Itaparica, also in Pernambuco. The centre of gravity was used to evaluate the mobility of the goat herd. It was observed that the centre of gravity for goat production in Brazil has always been in Juazeiro, in Bahia state. It's possible to conclude that, in the period analyzed, the variation that occurred was smooth. A few micro-regions were enough to gather 75% of the goat livestock in the country. Many regions that rear goats showed an increase in density and adaptability of the species, indicating that the goat activity is important as an economical and social alternative in the Brazilian regions.