

Present Situation and Opportunities for Better Geographical Equality in Livestock Production in Sri Lanka: An Analysis Based On Gini Coefficient

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Abstract

Local production and consumption of commodities contribute positively towards sustainable development by supporting local economies, minimizing environmental costs associated with transportation and processing, ensuring food safety and quality and reducing waste out-put per unit area. Information about the geographical distribution of different livestock industries are needed to identify opportunities and constraints for the promotion of local production and consumption. This study discusses the present geographical distribution of major livestock industries in Sri Lanka. Gini coefficient (GC) was used to determine the geographical distribution of cow milk, buffalo milk, beef, mutton, chicken egg, and paddy production and, backyard and commercial poultry farms. GC of each item was calculated using district-wise data for the period of 2013-2016. Depending on the availability of data GC of livestock products of India, Thailand, and the USA were calculated for comparison. Top four (NuwaraEliya, Kurunegala, Badulla and Kandy) and ten least producing Districts accounted for 50% and 11% of the national cow milk production, respectively. Sum of the production of 13 Districts accounted for only 10% of the national buffalo milk production. Meanwhile, Trincomalee (12.6%), Hambantota (12.4%), Monaragala (11.6%), Anuradhapura (10.3%) and Ampara (9%) accounted for 52% of the national buffalo milk production. Ampara (34%), Batticaloa (13%) and Anuradhapura (8%) alone contributed 55% of the total beef production. Colombo District reported the highest contribution (62%) to national mutton production. Kurunegala (51%), Puttalam (8%) and Gampaha (5%) contributed 64% to the total egg production. Gini coefficient of cow milk production (0.49) was statistically similar to chicken egg (0.49), buffalo milk (0.57), beef (0.60) and paddy (0.68) production. Meanwhile, GC of mutton production (0.82) was significantly higher than that of cow milk. Indicating the best geographical distribution, backyard (0.25) and commercial poultry (0.25) farms reported significantly lower GC values than other livestock products and paddy. The study concludes that regional distribution of commercial poultry production in Sri Lanka is better than countries such as Germany, The Netherlands, Thailand and India. While admitting the fact that some agro-climatic and demographical factors that could restrict a total equality situation, the paper presents opportunities available for better regional equality of livestock production in Sri Lanka.

Keywords: Gini coefficient, Local, Production, Sustainability

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