Exploring the Factors Affecting the Presence of Farmers' Markets in Rural British Columbia

Authors: Amirmohsen Behjat, Aleck Ostry, Christina Miewald, Bernie Pauly

Abstract: Farmers' Markets have become one of the important healthy food suppliers in both rural communities and urban settings. Farmers' markets are evolving and their number has rapidly increased in the past decade. Despite this drastic increase, the distribution of the farmers' markets is not even across different areas. The main goal of this study is to explore the socioeconomic, geographic, and demographic variables which affect the establishment of farmers' market in rural communities in British Columbia (BC). Thus, the data on available farmers' markets in rural areas were collected from BC Association of Farmers' Markets and spatially joined to BC map at Dissemination Area (DA) level using ArcGIS software to link the farmers' market to the respective communities that they serve. Then, in order to investigate this issue and understand which rural communities farmer' markets tend to operate, a binary logistic regression analysis was performed with the availability of farmer' markets at DA-level as dependent variable and Deprivation Index (DI), Metro Influence Zone (MIZ) and population as independent variables. The results indicated that DI and MIZ variables are not statistically significant whereas the population is the only which had a significant contribution in predicting the availability of farmers' markets in rural BC. Moreover, this study found that farmers' markets usually do not operate in rural food deserts where other healthy food providers such as supermarkets and grocery stores are non-existent. In conclusion, the presence of farmers markets is not associated with socioeconomic and geographic characteristics of rural communities in BC, but farmers' markets tend to operate in more populated rural communities in BC.

Keywords: farmers' markets, socioeconomic and demographic variables, metro influence zone, logistic regression, ArcGIS

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