



Research Paper

Analysis of disparity in broiler meat production of Karnataka state using principal component analysis

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ABSTRACT : The study aims to examine inter-district disparities in broiler meat production of Karnataka state. Composite indices of broiler meat production have been constructed for each districts based on optimum combination of indicator variables grouped under agriculture and infrastructure sectors. These indices were developed separately for agriculture and infrastructure sectors at four study points of time *i.e.*, 2003-04, 2007-08, 2011-12 and 2014-15. The technique of principal component analysis (PCA) has been used to construct the composite index. Using the PCA scores all the districts were ranked separately for agriculture and infrastructure sectors for the four study years. The analysis reveals that there was a wide disparity in broiler meat production among the districts of Karnataka state during the study years. Based on the quartiles, districts were classified as high, high medium, low medium and low broiler meat producing districts. The agriculture and infrastructure sectors were found to be highly correlated and have a positive influence on the broiler meat production of the state. Based on the eigen values of PCA for each districts revealed that area under irrigated land, area under maize and area under pulses in agriculture sector, whereas number of veterinary institutions and road length in the infrastructure sector were found to be the main causes for the disparity in broiler production among the districts of Karnataka State.

KEY WORDS: Principal component analysis, Disparity, Indicators, Broiler meat production, Quartiles

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