

THE USE OF FACTOR ANALYSIS IN THE DESCRIPTION AND IDENTIFICATION OF THE CHARACTERISTIC PROFILES OF MUNICIPALITIES IN MINAS GERAIS

Naje Clécio Nunes da SILVA¹
Wederson Leandro FERREIRA¹
Marcelo Ângelo CIRILLO²
João Domingos SCALON²

- **ABSTRACT:** *Factor analysis is a multivariate statistical technique used to identify a small number of latent factors from a number of observed and correlated variables. In this work, it was used factor analysis to determine the profiles of the predominant activities in thirty municipalities of the state of Minas Gerais. For the intended study, eight variables were measured in order to subsidize and support municipal and regional planning these municipalities. Using principal axes and orthogonal rotation methods, it was possible to characterize the municipalities through three factors (economic, land and farming). The results also showed that there was heterogeneity and discrepancy among the evaluated municipalities. This scenario suggests that there is a need for actions for further development of these municipalities and, thereby, providing a favorable environment for the reversal of this situation.*
- **KEYWORDS:** *Multivariate analysis, economics, agriculture, factorial structure.*

¹ Universidade Federal de Lavras – UFLA, Programa de Pós-graduação em Estatística e Experimentação Agropecuária - PPGEA, Departamento de Ciências Exatas - DEX, Caixa Postal 3037, CEP: 37200-000, Lavras, MG, Brasil. E-mail: naje.silva@ifac.edu.br; wedelean@gmail.com

² Universidade Federal de Lavras – UFLA, Departamento de Ciências Exatas - DEX, Caixa Postal 3037, CEP: 37200-000, Lavras, MG, Brasil. E-mail: macufla@dex.ufla.br; scalon@dex.ufla.br