

ABSTRACT

Food security is a critical issue that can trigger changes in economic stability, particularly in Central Java Province, and is included as one of the key points elaborated in the Sustainable Development Goals (SDGs). This study was designed with the objective of analyzing the correlation between rice prices, per capita GDP (PDRB), population size, paddy production, paddy land area, and access to proper clean water, against food security in Central Java from both the demand and supply perspectives. The study utilizes a quantitative approach with the Generalized Method of Moments (GMM) as the estimation method. The research data is in the form of panel data, collected from 35 regencies/cities in Central Java, covering the time span from 2018 to 2023. This secondary data was obtained from the Department of Industry and Trade, the Central Statistics Agency (BPS), and the National Food Agency of Central Java Province. The findings of this study reveal that the rice price variable has a positive and significant impact on food security in Central Java Province. The per capita GDP variable also demonstrates a positive and significant impact. Conversely, the population size variable exhibits a negative and significant impact on food security. Variables for paddy production, paddy land area, and clean water access all show a non-significant impact. Improving food security in Central Java requires an integrated strategy encompassing the control of rice prices, optimization of agricultural land, increased paddy production, and the expansion of access to proper clean water.

Keywords: *food security, demand and supply, rice price, GRDP per capita, population, rice production, rice field area, safe drinking water.*