

# **Estimating the Number of Poor Households in The Municipalities of Cavite: A Small Area Estimation Approach**

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## **Abstract**

Poverty has always been a challenge in many countries in the world. Based on the report of Philippine Statistics Authority (PSA) in 2015, more than 26 million Filipinos remain poor, living in extreme poverty. Because of the reported poverty incidence in the different countries, poverty alleviation has always been a part of each country's development programs. Since the poverty problem is serious, and the resources are limited, this research was conducted to efficiently target the poor households especially at a lower level (municipal) by estimating the number of poor households. The method of estimating at a lower aggregate is called Small Area Estimation (SAE). SAE, is the method of estimating reliable statistics in small geographical area or spatial micro population unit. The data used in this study came from the Census of Population and Housing (CPH, 2010) and the Family Income and Expenditure Survey (FIES, 2009) retrieved from the Philippine Statistics Authority (PSA). After selecting the best fit model, the number of poor households and the corresponding poverty incidence were computed in each of the municipalities in Cavite. The poorest municipality in Cavite is GMA, followed by Carmona. On the other hand, the municipality with the lowest poverty incidence is Indang, followed by Trece Martires City. Future researchers may do the same methodology with a modification on the variables used for a more efficient estimate.

**Keywords:** *Small Area Estimation, Poverty, Poverty Incidence, Poor Households*