

## Spatial Patterns and Determinants of Poverty: The Case of Albay and Camarines Sur Provinces in Bicol, Region, Philippines

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<http://giswin.geo.tsukuba.ac.jp/sis/en/index.html>

Poverty has a spatial dimension. Geography, particularly the physical environment, plays a significant role in the poverty condition of communities and of the people living in disadvantaged regions. However, this spatial dimension of poverty has not been given much attention in many poverty studies, especially in the Philippines. In an attempt to underscore its importance, this study explores the spatial patterns and the possible underlying determinants affecting poverty condition in two adjacent provinces of Albay and Camarines Sur, located in Bicol Region, one of the poorest in the country. Agro-climatic condition which consists of slope, elevation, soil, rainfall and access to river, as well as access to road infrastructure and proximity to major markets were all derived using GIS. Together with the influence of government programs and policies i.e., fiscal decentralization and land distribution, and population growth, all of these variables were combined using multiple regression analysis to investigate their effect on poverty. Results of the study show that the spatial patterns of poverty in terms of incidence exhibit spatially heterogeneous characteristics. The spatial variation in the incidence of poverty is mainly caused by disparities on access to road infrastructure which is further exacerbated by loopholes and geographical bias in fiscal funding priorities and deficiency in agrarian reform implementation. Moreover, proximity to major cities where there is a high concentration of development and economic activities and differences in agro-climatic features, particularly, elevation, slope, and rainfall also proved to be significant determinants to poverty and suggest the presence of geographically disadvantageous areas within the study site. Thus, geography and facets of public policy have a strong impact on the condition of poverty of communities.