

<Abstract>

**A Study on Generation Factors of Municipality Solid Waste
– Using on Geographically Weighted Regression Analysis –**

Chonnam National University, Byeon, Jang-Seop
Chonnam National University, Na, Ju-Mong
Chonnam National University, Bae, Jeong-Hwan

Solid waste generation trends differ to variations of consumption patterns in different locations. Consumption patterns, in turn, are affected by many factors relevant to socio-economic, environmental, and demographic conditions. Therefore, they must identify to develop an effective solid waste management system and minimize waste generation rates. There will be exists spatial non-stationarity between dependent and independent variables in multivariate statistic models to used spatial data. So, this study is used geographically weighted regression (GWR) model, it is consider as spatial bias to analyze solid waste generation factors in the Republic of Korea. In this study, spatial and temporal scope set up 206 local governments in 2010. Dependent and independent variables are used solid waste generation, GRDP, population density, education level, unemployment and annual rainfall. This study review spatial scope detailed more than other studies. And we are classified waste, total, household, business and construction waste, it is differed generation factors classification of waste. And then, we analyze to generation factors of household and construction waste that existed spatial auto-correlation using GWR. GWR reveals the local impact of a given factor on the waste generation of different local governments. Results show that spatial auto-correlation is not high for the variables more than OLS. And it was revealed different regression coefficient of waste generation factors among the local governments. Finally, we hope that our study can be purposed effective waste management in local governments.