ABSTRACT

THE EFFECT OF ECOLOGICAL PRESSURE OF URBAN AREAS ON CRIMINALITY RATE IN INDONESIA

By

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This research was carried out to find out the effect of ecological pressure on criminality rate in urban areas. The research was conducted in Laboratory of Geo Information Lampung University, whereas the data were obtained from Subdit IV Tipidter Ditreskrimsus POLDA Lampung (Sub Directorate IV, Special Crime Directorate, Lampung Police Headquarter), recorded from October 2014 – December 2014. This research employed modelling approach by using secondary data collected from 36 regencies/municipalities in Indonesia. The model used was multiple linear regression by using several dummy variables. Response variable employed was criminality rate covering murder, rape, physical abuse, kidnapping, vandalism, theft, deception, narcotics, and anarchistic demonstration. Defining variable was urbanism rate, with air pollutants (CO, HC, CO$_2$) as the main variable supported with accompanying variables (recreational places, worshipping places, and religious leaders). Based on the analysis of linear regression by using software Minitab V.16 on validity level of between 5% and 10% the result showed that urbanism rate was one variable which could lead to an enhanced criminality rate. While the variable of environmental pollutants (CO, HC dan CO$_2$) did not affect the rate significantly.

Keywords: air pollutants, criminality, urban areas