

HGG001-09

Room:201A

Time:May 26 11:00-11:20

Trend on Jabodetabek Region LUCC_Urban expansion and sustainable issues in regional and national context

Ernan Rustiadi^{1*}, Didit Okta Pribadi¹, Titan Agrisantika¹, Andrea Emma Pravitasari¹, Diar Shiddiq¹

¹CrestPent, Bogor Agricultural University

The study focuses to describe spatial development characteristics of so call Jabodetabek Region. For that purpose, the study examines the spatial dynamics of urban development of Jabodetabek Region as the Greater Jakarta expansion. Being significantly different from the urbanization and suburbanization in USA and Europe and other countries, the continuing outward expansion of Jabodetabek Region have not only some similarity in many aspects of urban development spatial pattern, but also showed some significant differences. The development of Jabodetabek Region have similar in their trend to be the primate city of its country whereas the urban systems arising with densely population, mixed land uses and mixed economic activities of the inhabitants in their suburb. On the other hand, agriculture land uses, especially rice fields areas and the spread of farming households in the suburbs are still significant but spatially distributed in a different pattern.

This study aims to: (1) describe spatial pattern and dynamics of land use cover changes (LUCC) of Jabodetabek Megapolitan during the period of 1972-2010 due to its dynamics of population and socioeconomic; and (2) develop some urban expansion models to forecast environmental impacts. Satellite images and GIS analysis were employed for LUCC analysis. Statistics analysis of spatial decay function models were employed to analyze spatial pattern of LUCC and demographic patterns. Suburbanization and a weak system of integrated planning imply to many environmental problems such flood, drought, sea-water intrusion, etc. It's also impact on economic inefficiency on natural resources use. The hegemony of economy in Jabodetabek is not balanced by sufficient multiplier effects on the national economy. Further, it has brought about a social fragmentation that is likely to sharpen potential social conflicts among the communities in the suburban areas.

Spatial polarization of economic activities of Jabotabek region makes contrast the city's core with its surrounding areas in Jabotabek Region. Urban development of Jabotabek Region tends to form a concentric spatial distribution of land use and socioeconomic aspects. The core of Jabotabek Region is highly predominated by manufacture and services activities and it has been surrounded by highly mixed land use urban fringe and the most remote areas predominated by agricultural land uses and farmers settlement areas.

The hegemony of national economy in Jabodetabek, particularly as a result of the dominant contribution of tertiary and primary sectors in the region is in fact not accompanied by the presence of adequate multiplier effects on the national economy. Instead, what happens is the backwash phenomenon between DKI Jakarta and other regions in Indonesia outside the metropolitan. A synergic (generative) interrelationship between the development of this region and other Indonesian regions can be created by integrating the strategies of regional development.

Keywords: land use/cover change (LUCC),, Jabodetabek megapolitan, spatial distribution of land use, suburbanization,