Spatial Dynamics of West Sulawesi Province to Support Planning Development Model of Regional Sulawesi Island

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Abstract: Natural and artificial resources which contained on the West Sulawesi province is very potential resource to support implementation of regional autonomy. The purpose of this research is to determine the land use on the West Sulawesi province using satellite imagery data and GIS. Methods of this research are comparing multitemporal data (1997, 2003, 2007, 2012) of land use from interpretation of satellite imagery Landsat ETM+. Changes land use on the West Sulawesi province is affected by: (1) economic factors such as income level, investment in the agricultural sector, industry sector capacity building and accretion / excavation, construction of economic infrastructure, the rapid increase in land prices, development of social amenities such as education and health due to the demands of regional development, (2) socio-cultural factors such as (i) the culture of the "happy" living in and around forest areas, (ii) a habit or behavior of farmers to agricultural practice shifting cultivation, (iii) "gathering force "for clearing agricultural land / plantation where farmers assisted by other farmers in the area alternately each for opening / clearing land together until all the farmers in the group it was their turn to be assisted by personnel of other farmers in the open / agricultural land clearing, land either recently opened or are re-planting, (iv) ownership of land (the Landlord) as a determinant of "community Social Status", (v) land fragmentation due to "legacy" (do not show a high social status levels of society, eventually sold the land belonging to the landlords for industrial developers), (3) institutional and policy factors such as the brand of government programs such as the transfer of the commodity mix (mixed cropping) to a specific export commodities (farm to farm), obtaining the building permit (IMB) and building Tax (the United Nations).

Keywords: spatial dynamics, land use, landsat, GIS

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