## **ABSTRACT**

Agricultural land conversion to non-agricultural sector occurs in Yogyakarta Special Region (DIY), especially in Sleman District. This study utilizes landscape photo shooting in 1990, 1995, 2000, 2005, 2010, and 2015 in identifying land use in Sleman District which has 17 subdistricts. The scope of the vast research area will have different land uses and many types.

The purpose of this research is to know land use change and land conversion rate in period 1 1990-1995, period 2 year 2000-2005, and period 3 year 2010-2015. The research was conducted using descriptive method which analyzed spatially using image, that is analyzing the usage change then compare the data of land use classification result.

The result of this research shows that the change of the land of water body has changed and does not increase the amount of area and the paddy field has the highest land use change and the lowest addition. The rate of land conversion in Sleman Regency in the period of year 1 is 1,790.61 ha / year in paddy fields, the second year period of 694.29 ha / year on the land of water bodies, and the 3 year period of 1,553.47 ha / year on the plantation land.

**Keywords:** Land Conversion, Sleman, Spatial Analysis, Landcover Map