

## ABSTRACT

*Land use is certain exploiting areal from earth surface by human being in order to fulfilling its life requirement. The exploiting such as for the seatlement, agriculture, etc. As the population growth there is a divert or change of function from land use to seatlement area getting growth either.*

*Method used in this research is remote sensing technique and Geographical Information System (GIS). Remote sensing technique by manual interpretation of IKONOS Multispectral image with the resolution 4m based on virtue difference of shape, size, colour, pattern, texture and site from the image and identifiedly from land use map 1993 utilizing to get the land use map 2002 scale 1:5000. Geographical Information System Technology (GIS) used to know big and type of use of year land use 1993 and year 2002 and its change for the seatlement, and the analysis spasial in developing seatlement with the scoring methods. Gift score / weight for the criterion of accessibility of roadway and land use map ( as according to result analyse the change of land use for seatlement).*

*The result performs that, in 1993 land uses of subdistrict Sukolilo are seatlement  $5639964,368m^2$  (19,631%), ricefield  $4743011,026m^2$  (16,508 %), abandon area  $2717780,983 m^2$  (9,459%), wasteground  $372927,459 m^2$  (1,298%), fishpond  $13110198,087m^2$  (45,631%), mangrove  $304414,749m^2$  (1,059%), etc (road, river)  $1842895,385 m^2$  (6,414 %) and in 2002, seatlement  $9238916,233 m^2$  (30,517%), ricefield  $3110444,457m^2$  (10,274%), abandon area  $236298,670m^2$  (0,781%), wasteground  $341475,278m^2$  (1,128%), fishpond  $14413789,506m^2$  (47,610%), mangrove  $543290,014m^2$  (1,791%), etc (road, river)  $2389918,578m^2$  (7,894%). In 9 years, there were  $1542940,670m^2$  increased area, caused by Surabaya east coastal sedimentation.*

**Keyword :** GIS, Land Use, Spasial Analys, Manual Interpretation.