

## AGRICULTURAL LAND CONVERSION ON MAKASSAR VICINITY

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### ABSTRACT.

Makassar city is the capital South Sulawesi province ( $05^{\circ} 08' S$ ;  $119^{\circ} 25' E$ ) sited on the western coast of the province, with population around 1.4 million (2011). The city laid on the northern side (downstream) of the Jeneberang river and shares the river's floodplain with the city of Sungguminasa.

The city of Makassar is a waterfront city surrounded by fertile agricultural land (mostly the rice field and dry land agriculture) on southern, eastern and northern sides. The rising demand of residence and business are enhance the sprawling of the city front lines over the fertile and technically irrigated fields on its vicinities. The advance of urban sprawl in Makassar and Sungguminasa traced by analyzing the multi-temporal data of remotely-sensed data on three sub urban area i.e. Kecamatan Pallangga and Sombaopu on south-eastern direction (Kab. Gowa), Jeneberang delta and Kecamatan Biringkanaya on the northern area.

The analyses shows that the sprawling of the city front lines over the last 10 to 15 years has been occurred rapidly, especially on Jeneberang delta where the farms has been converted into massive business area with the rate of conversion around 18% (8.4 ha/yr.) and 34% (30.3 ha/yr.) within the 1999 to 2003 and 2003 to 2010 respectively. The conversion rate in Kecamatan Biringkanaya during 1995 to 2003 and 2010 are 37 and 66 ha/year respectively and in Kecamatan Pallangga and Sombaopu is observed 183 ha/year from 1996 to 2010

Keywords: Agricultural land, remote sensing, urban sprawl, conversion rate, supervised classification