Identification of Paddy Field Distribution and Rice Cropping Pattern for Rice Production Forecasting in West Java

Ernan Rustiadi[1]*, La Ode Syamsul Iman[1], Tutuk Lutfiyanti[2], Wilona Octora[2]
Ernan Rustiadi[1]*, La Ode Syamsul Iman[1], Tutuk Lutfiyanti[2], Wilona Octora[2]

[1]Center for Regional Systems Analysis, Planning and Development, Bogor Agricultural University, [2]Faculty of Agriculture, Bogor Agricultural University
[1]Center for Regional Systems Analysis, Planning and Development, Bogor Agricultural University, [2]Faculty of Agriculture, Bogor Agricultural University

There is a growing demand for rice with increase in population in Indonesia. Rice is still the major staple food in Indonesia, therefore the task of increasing rice production continues to engage the attention of national planner. West Java Province is one of the main centers of the national rice production area. But now the province also has been developed as a center of the industrial area and urban agglomeration along with the pressures of population and rapid economic growth. Consequently rice fields in West Java province have been experiencing a constant pressure of rapid land conversion. On the other hand, changes in rainfall patterns, changes of irrigation systems and farmers institutions have changed the cropping pattern towards a more complex pattern. Efforts to maintain food security is becoming increasingly complicated and projections a more accurate rice production system should be developed in line with the high rate of national population growth and rice consumption. This research was conducted as an effort to develop a more accurate method in identifying the distribution and rice cropping pattern to estimate the national rice production. This study was conducted to test a new method in the province of West Java by using MODIS satellite image data in the period of 2002-2011.

: Paddy field distribution, Rice cropping pattern, MODIS satellite image, Rice Production Forecasting
Keywords: Paddy field distribution, Rice cropping pattern, MODIS satellite image, Rice Production Forecasting