**Remotely Sensed Crop Monitoring for Agricultural Development Planning in Indonesia[[1]](#footnote-1)**

by

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**ABSTRACT**

Asian countries are responsible for approximately 90% of the world rice production and consumption. Indonesia is the third largest rice producer in the world after China and India with 71.28 million tons of production, average productivity level at 5.15 ton/ha, and harvested area of 13.84 million ha (2013). Agricultural land has a strategic function as main food provider for Indonesian and the government is challenged with both short and long term planning to meet rice self-sufficiency. A variety of agricultural information, especially the cultivated area, growth rate and yield level of major crops, is an important basis to draw food policy and economic planning and development. Research on remote sensing technology for rice monitoring has been conducted in Indonesia since 1997. SAFE activities for rice monitoring was started in 2010 by LAPAN, and continued by IAARD in 2012. The output of this activity resulted in providing several methods for rice monitoring activity and are available to be carried out by relevant institutions in Indonesia. Currently, IAARD uses satellite imagery to map the area of ​​cultivation and monitor the growth of rice for the period of May to September 2014. This activity has been directly guarded in eight rice producing centers in Indonesia. Through standing crops information, verification using satellite imagery will streamline the work program of the Ministry of Agriculture at which policy alternatives could be formulated in respect to infrastructure preparation and distribution of fertilizers, including arrangement on irrigation management along with water pump system in the event of El Nino. Moreover, such information should facilitate harmonious communication between the Ministry of Agriculture and the local Office of Agriculture to improve agricultural development planning and implementation.

1. ACRS 2014 JAXA Special Session, October 28, 2014, Nay Pyi Taw, Myanmar [↑](#footnote-ref-1)
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