GEOGLAM Asia-RiCE initiative

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The Asia-RiCE initiative (http://www.asia-rice.org) has been organized to enhance rice production estimates through the use of Earth observation satellites data, and seeks to ensure that Asian rice crops are appropriately represented within GEO Global Agriculture Monitoring (GEO-GLAM) to support FAO Agriculture Market Information System (FAO-AMIS). Asia-RiCE is composed of national teams that are actively contributing to the Crop Monitor for AMIS and developing technical demonstrations of rice crop monitoring activities using both Synthetic Aperture Radar (SAR) data (Radarsat-2 from 2013; Sentinel-1 and ALOS-2 from 2015; TerraSAR-X, Cosmo-SkyMed, RISAT, and others) and optical imagery (such as from MODIS, SPOT-5, Landsat, and Sentinel-2) for 100x100km Technical Demonstration Sites (TDS) as a phase 1 (2013-2015) in Asia. with satellite –based cultivated area and growing stage map.

The Asia-RiCE teams are also developing satellite-based agro-met information for rice crop outlook, crop calendars and damage assessment in cooperation with ASEAN food security information system (AFSIS) for selected countries (currently Indonesia, Thailand, Vietnam, Philippine, and Japan; http://www.afsisnc.org/blog), using JAXA's Satellite-based MonItoring Network system as a contribution to the FAO AMIS outlook (JASMIN) with University of Tokyo (http://suzaku.eorc.jaxa.jp/cgi-bin/gcomw/jasm/jasm_top.cgi).

From 2016 as a phase 2, Asia-RiCE initiative deploy up-scaling activity from a province (100x100km) to major crop areas or entire country to implement operational use for rice crop production information in low Mekong, Vietnam and top 10 provinces in Indonesia using space based technology in cooperation with VAST, VNSC, CESBIO, MOA/Indoensia, LAPAN and JAXA.

This paper reports this year activity of 2016 accomplishment and way forward.

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