Indonesia Rice: Area Reduced due to Corn Expansion

USDA estimates Indonesia 2018/19 rice production at 37.1 million metric tons (milled-base), up slightly from last year. Rice production has increased since 2014 (Figure 1) even though rice area has remained relatively steady. The Government of Indonesia (GOI) has implemented several efforts to improve rice production such as stimulating technological innovation, providing subsidized fertilizer, and repairing irrigation facilities. In 2018/19, however, rice area declined in the first-cycle planting campaign (October to December) due to a drier-than-normal start that extended into November. This delayed rice planting in areas such as Central Java, one of the main producing provinces, where a reported 75 percent of planting was delayed. Additionally, the GOI provided incentives to plant corn. Some farmers took advantage of attractive corn prices during the prolonged dry weather period by planting corn instead of rice. Lowered production expectations are attributable to planting delays, less area planted to rice, and a reported decrease in government-provided subsidies this year.

Indonesia’s rice sector on Java is facing a decrease in cultivated area due to an increase in the housing and industrial sectors. Satellite imagery shows an increase in urban area (Figure 2). The agricultural land conversion rate to other uses has reportedly been increasing on Java which has the largest population of the islands. To offset this decrease in rice area, the GOI has pushed for an increase in production by expanding area cultivated to rice through the land-recovery program. This program focuses on revitalizing swamp-land for the use of rice cultivation, mainly on the islands of Kalimantan, Sumatra and Sulawesi. A USDA FAS crop analyst and USDA Office of Agricultural Affairs representatives in Jakarta traveled to Indonesia’s South and North Sulawesi provinces in late February 2019 to assess rice conditions. Provincial officials, farmers, and milling companies attributed increased rice production to better technology leading to increased cropping intensity, increased use of hybrid seeds, and some area expansion through the land-recovery program. However, widespread rice expansion through the land-recovery program has yet to be fully implemented due to constraints involving costs and time. Due to a combination of rice area converted to corn and land conversion to the housing and industrial sectors, USDA estimates Indonesia 2018/19 area at 12.2 million hectares down 50,000 hectares from last year. Yield, however, is estimated at 4.79 tons per hectare, up slightly from last year.

Approximately 50 to 55 percent of Indonesian rice production is from the island of Java, while Sumatra and Sulawesi contribute 20 and 12 percent, respectively (Figure 3). Rice in Indonesia is planted in 3 seasons and follows seasonal monsoon rainfall patterns. Irrigated rice planting for the first season begins in October and is harvested in February; second season rice begins in April and is harvested in July; third season begins in August and is harvested in November (Figure 4). Although only 60 percent of rice is irrigated it accounts for more than 85 percent of Indonesia’s total output. The contributions from the USDA Office of Agricultural Affairs in Jakarta are gratefully acknowledged.
Figure 1
Satellite Imagery: Toll Road Expansion In Sragen Regency

Sept 1 – 15, 2017 (Composite)

Sept 1 – 15, 2018 (Composite)

Area encircled indicates expansion of roads and suburban areas, which has taken away from rice area

Source: ESA Sentinel-2 MSI

Urban

Vegetation

Water

0 125 250 500 750 1,000 Miles

Figure 2
For additional information contact Justin Jenkins, Justin.Jenkins@fas.usda.gov, 202-720-0419

Current area and production estimates for grains and other agricultural commodities are available on IPAD's Agricultural Production page:
Crop Explorer https://ipad.fas.usda.gov/cropexplorer/or

Production, Supply and Distribution Database (PSD Online):

U. S. Department of Agriculture
Foreign Agricultural Service
Office of Global Analysis
International Production Assessment Division Ag Box 1051, Room 4630, South Building
Washington, DC 20250-1051
Telephone: (202) 720-1662; Fax: (202) 720-1158