Malaysia Palm Oil: Beneficial Weather helps to Increase Annual Production

USDA estimates Malaysia 2018/19 palm oil production at 20.5 million metric tons, up 4 percent from last year. In 2015/16 Malaysia palm oil production was negatively impacted by the El Niño phenomenon, which led to one of the worst outputs since 2009. El Niño events have extreme impacts to palm oil production and the magnitude of impact directly correlates to the intensity of the event. When El Niño occurs in Malaysia, prolonged periods of lower-than-normal rainfall and higher-than-normal temperatures lead to increased levels of water stress for palm trees. As a result, the yearly production of fresh fruit bunches (FFB) decreases. Since the 2015/16 El Niño, Malaysia palm oil production (Figure 1) has rebounded due to adequate weather leading to increased output of FFB, according to industry sources. In addition, industry sources also report that it takes up to 36 months after a significant weather event until production of FFB fully recovers.

The month of February is typically one of the lowest crude palm oil (CPO) producing months in the marketing year due to the start of the dry season. However, the Malaysia Palm Oil Board (MPOB) estimated its CPO production for the month of February at 1.55 million metric tons, up 15-percent from last February. The record output for February 2019 was attributed to favorable weather (Figure 2). Output is typically lower during the dry season due to limited rainfall and higher temperatures, causing the palm tree to produce more male flowers and less female flowers. Less pollination occurs which lowers the production rate of harvestable fruit. As of February 2019, cumulative palm oil production from MPOB had reached 8.90 million metric tons, which reflects a 2-percent year-to-year increase and a 15-percent increase from the 5-year average (Figure 3). The USDA palm oil marketing year is October through September in which the first quarter (October through December) and the fourth quarter (July through September) are the main producing months for Malaysia palm oil.

A USDA FAS crop analyst and representatives from the USDA Office of Agricultural Affairs in Kuala Lumpur, Malaysia travelled to Carey Island in Selangor province, Malaysia in early March 2019 (Figure 4). During the visit, government officials, industry representatives and plantation companies presented an outlook for palm production as well as its potential challenges. The Government of Malaysia’s policy is to cap area expansion at 6.5 million hectares by 2023. This policy was created due to increasing concerns about palm oil plantation expansion, which is causing deforestation. USDA estimates Malaysia 2018/19 harvested palm oil area at 5.3 million hectares, up 2 percent from last year. The year-to-year increase in harvested area is due to newly producing areas in East Malaysia.

Palm oil can begin yielding FFB at year 5, however peak yields are obtained between years 8 through 18. Malaysia’s primary focus and concern with the palm oil sector is sustainability. One effort aimed at achieving sustainability is to have both plantations and smallholders adopt the Malaysian Sustainable Palm Oil (MSPO) standard. This standard focuses on aligning the management of palm oil production with national laws and regulations. MSPO certification is mandatory for both plantation and smallholders by the end of 2019. Some of the benefits associated with standardizing the palm oil sector is that it will allow for increased productivity, traceability and presents a better image to address the negative perceptions associated with deforestation in the palm oil industry.
Yields for Malaysia palm oil have increased slightly since the 2015/16 El Niño signifying a rebound due to favorable conditions. Palm oil yields are moisture sensitive; to obtain average yield, palm trees require between 1,500 to 2,000 millimeters of evenly distributed rainfall annually with maximum and minimum temperatures of 29°C to 33°C and 22°C to 24°C, respectively. Due to the future cap in palm oil area, increases in production will be driven from better agriculture management practices as well as continued investments in the use of hybrid seed, which are standards from MSPO. USDA estimates Malaysia 2018/19 palm oil yield at 3.87 metric ton per hectare, up 3 percent from last year.

Malaysia palm oil is harvested year-round, typically every 10 days. The main producing regions are Sabah and Sarawak, which account for approximately 31 and 17 percent of total production, respectively (Figure 5). The contributions from the USDA Office of Agricultural Affairs in Kuala Lumpur, Malaysia are gratefully acknowledged.
Figure 1
Figure 2
Figure 3

Total Malaysia Monthly (Cumulative) CPO

Production (MT)

- 0
- 5,000,000
- 10,000,000
- 15,000,000
- 20,000,000
- 25,000,000

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP

source: MPOB

5-year Avg.  2015  2016  2017  2018
Figure 4

Palm Plantation Located in Malaysia’s Selangor Province

Photo courtesy of Justin Jenkins taken March 6, 2019
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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):