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Global Market Analysis
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Commodity Intelligence Report

PHILIPPINES RICE: AREA INCREASES AND FAVORABLE WEATHER LEAD TO ESTIMATED RECORD PRODUCTION

For market year (MY) 2020/21 Philippines estimated rice production is at record levels as area increases and favorable seasonal weather has benefited the crop. From April through June 2021, Phillipines is harvesting its quarter two crop, the last quarter for the MY 2020/21 season while planting quarter three, during the first part of MY 2021/22. Rice area increases for MY 2020/21 were partially supported by the Philippine government who implemented incentivized programs. These programs are aimed at increasing the country's self-sufficiency rate from 87 percent to 93 percent, coined as the "Plant, Plant, Plant Program." The support programs include funding more rice farmers, investing in improved seed varieties, and supporting increased mechanization. As a result, there has been a year-to-year increase in rice cultivation observed throughout the country, most notably in the Cagayan Valley, Central Luzon, and Western Visayas regions (see Figure 1). Though area increases were observed in MY 2020/21, a larger impact to the estimated record output was driven by favorable seasonal weather, boosting yield potential to an estimated record high.

The Philippines' main rice-growing regions are largely irrigated. However, seasonal rainfall remains vital for replenishment of water reserves as well as benefiting rainfed rice crops. Tropical Cyclone activity, though devastating, is one of the weather phenomena that supply a source of rainfall to the Philippines' rice-growing areas. In MY 2020/21, Philippines experienced an unusually greater number of typhoons during the period from October through November compared to normal, which provided ample water supply and benefited the rice crop (see Figure 2). As a result, yield potential is at a new estimated record, up from the previous record held in MY 2019/20 (see Figure 3).

Throughout the season, the rainfall distribution observed in MY 2020/21 was near-to-above average and was greatly improved from the MY 2019/20 rice season campaign. Rice yield varies widely throughout the Philippines which is mainly due to agroclimatic conditions that vary throughout the country. Due to vast differences in the Philippines' climatology, there are four defined climatic types that characterize regions based on rainfall distribution. The first type (Type 1) is represented in the western parts of Luzon and Western Visayas; these regions have two pronounced seasons with the dry season from November to April and the wet season from May to October (see Figure 4). The second type (Type 2) is represented in Eastern Luzon, Eastern Visayas and North-eastern Mindanao; here it is essentially wet year around, however the highest rainfall distribution is observed from November to January (see Figure 5). The third type (Type

3) is represented in Central Visayas, Western Bicol, Northern Mindanao; here, the dry season extends from November to February and the wet season is from March to October (see Figure 6). Lastly, the fourth type (Type 4) is represented in Central Mindanao, where rainfall is evenly distributed throughout the year (see Figure 7). These diverse climatic types impact the rice planting dates which are widely different from one region to another.

Philippines rice is cultivated throughout the year and production is reported quarterly (see Figure 8). USDA's Philippines rice market year begins with quarter three, which is planted in April through June and is harvested in July through September. For quarter three, cultivation is focused mainly in the Western Visayas region which accounts for about 20 percent of the quarterly output. Quarter four is the largest at 40 percent, and it is planted in July through September and is harvested in October through December. Cultivation is focused mainly in Ilocos and the Central Luzon region with about 17 and 21 percent, respectively, for quarter four output. In quarter one, the second largest at 20 percent, planting begins in October and extends through December; harvesting occurs from January through March. For quarter one, cultivation is mainly focused in the Cagayan Valley, Central Luzon, and Western Visayas regions. For quarter two, rice planting begins in January to March and is harvested in April to June. Cultivation is mainly focused in the Central Luzon and Cagayan Valley regions.

Quarterly rice production for MY 2020/21 exceeded yearly expectations for quarters three and one, up 15 percent and 8 percent, respectively, from last year. Higher quarterly rice output was evidenced via satellite-derived indicators such as the Percent of Average Seasonal Greeness (PASG). Vegetative indices depicted higher biomass observed during the peak rice season in the main growing regions for both quarters three and one compared to MY 2019/20 (see Figure 9 and Figure 10). Quarter four rice production output was down 1 percent from last year, however the output was above the 5-year average by 2 percent.

USDA estimates 2020/21 Philippines rice production at a record 12.4 million metric tons (mmt—milled basis), up 4 percent from last year. Philippines estimated rice production is the highest on record, surpassing the previous record in 2017/18 at 12.2 mmt (see Figure 11). Harvested area is estimated at 4.8 million hectares (mha), up 4 percent from last year. Yield is estimated at a record 4.10 tons per hectare (t/ha), up slightly from last year's record of 4.08 t/ha. Yield is up 4 percent from the 5-year average.

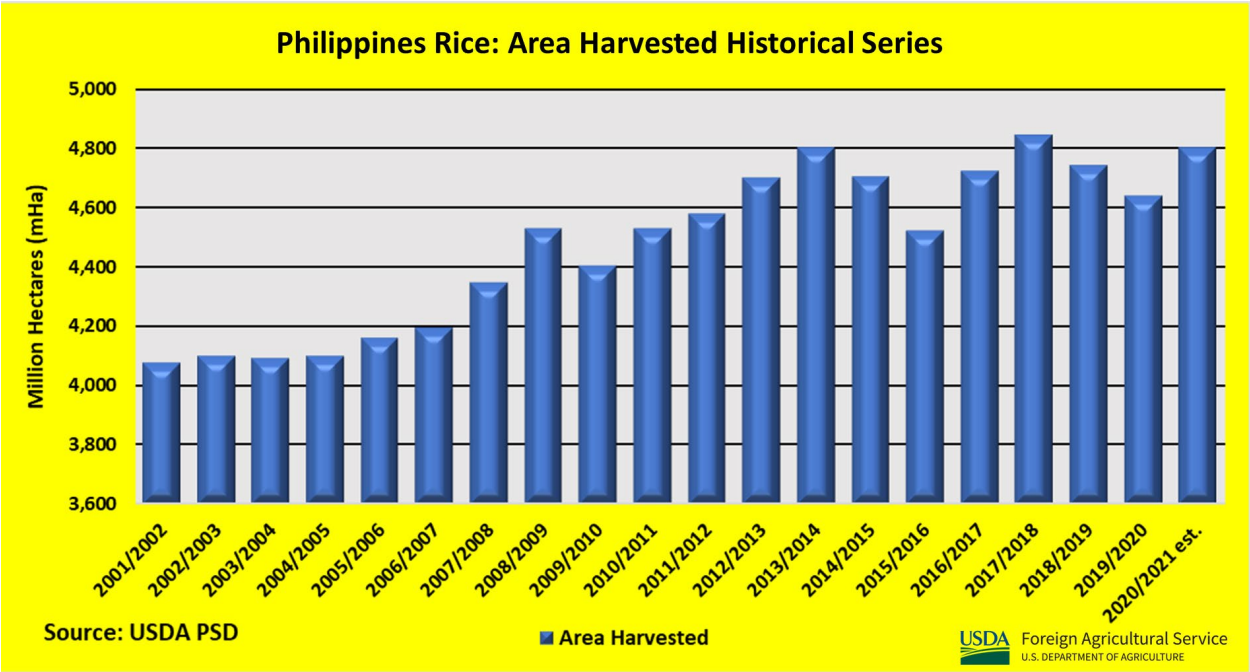

Figure 1. Philippines rice area harvested historical series. Source USDA PSD.

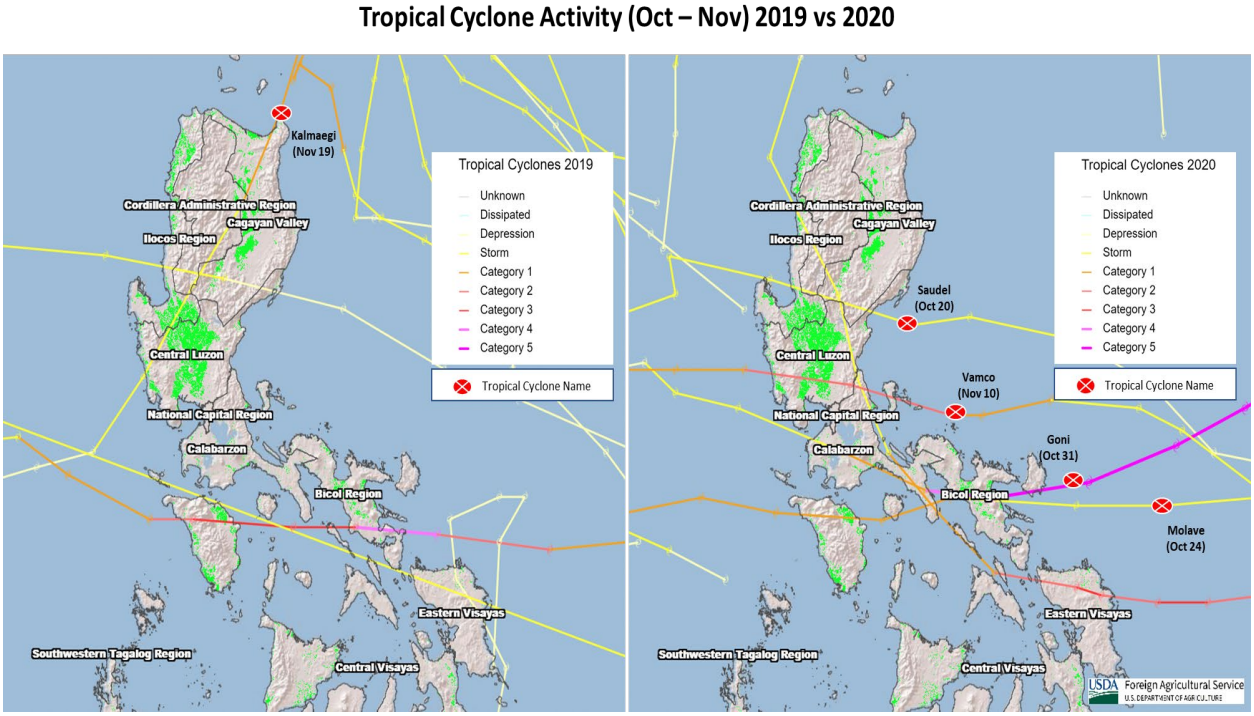

Figure 2. Annual Tropical Cyclone seasonal comparison 2019 vs. 2020 during the months of October and November. In 2020, the Tropical Cyclone activity was unusually greater than average and was significantly higher than the total recorded in 2019 for the months of October and November.

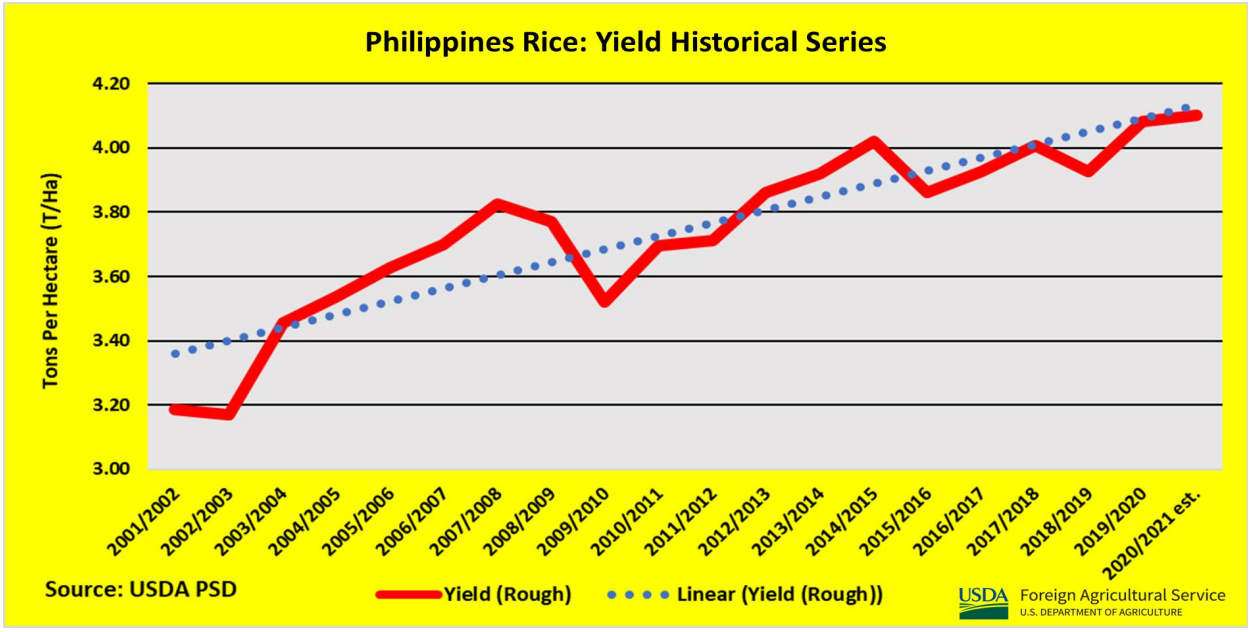

Figure 3. Philippines rice yield historical series. Source USDA PSD.

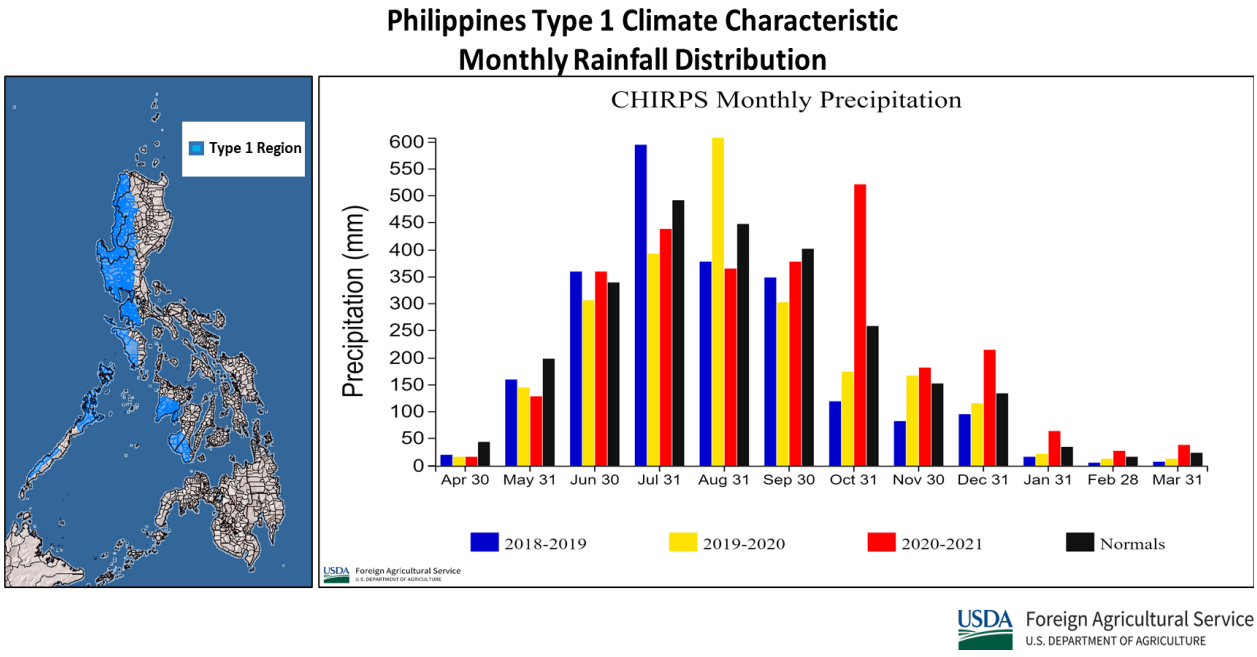

Figure 4. Philippines Type 1 climatic rainfall distribution indicating normal rainfall distribution in a comparison of 2018/19, 2019/20 and 2020/21. Source Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS).

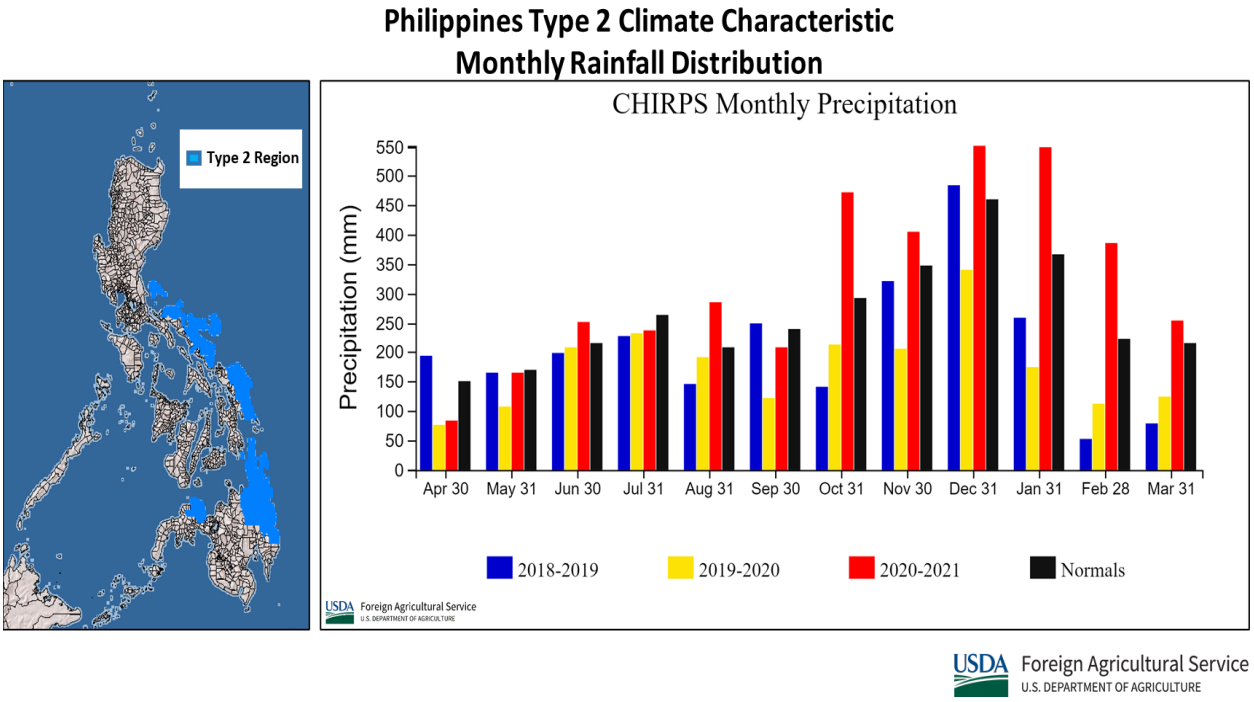

Figure 5. Philippines Type 2 climatic rainfall distribution indicating normal rainfall distribution in a comparison of 2018/19, 2019/20 and 2020/21. Source Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS).

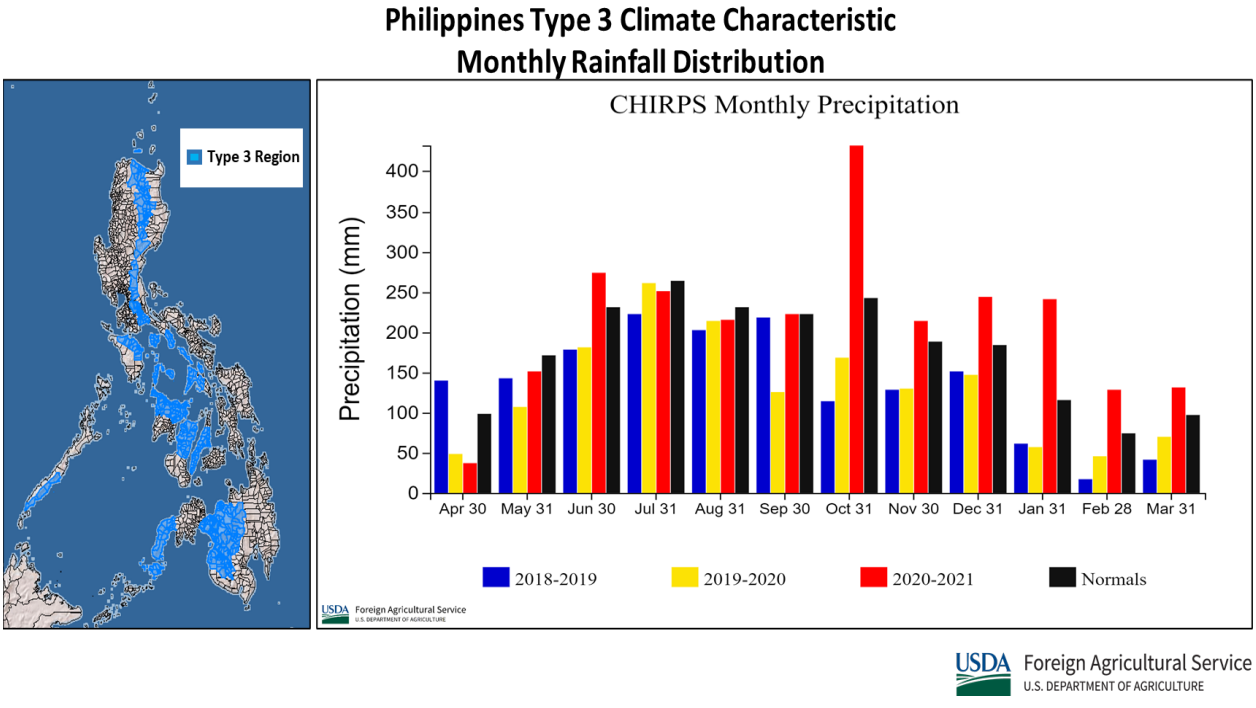

Figure 6. Philippines Type 3 climatic rainfall distribution indicating normal rainfall distribution in a comparison of 2018/19, 2019/20 and 2020/21. Source Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS).

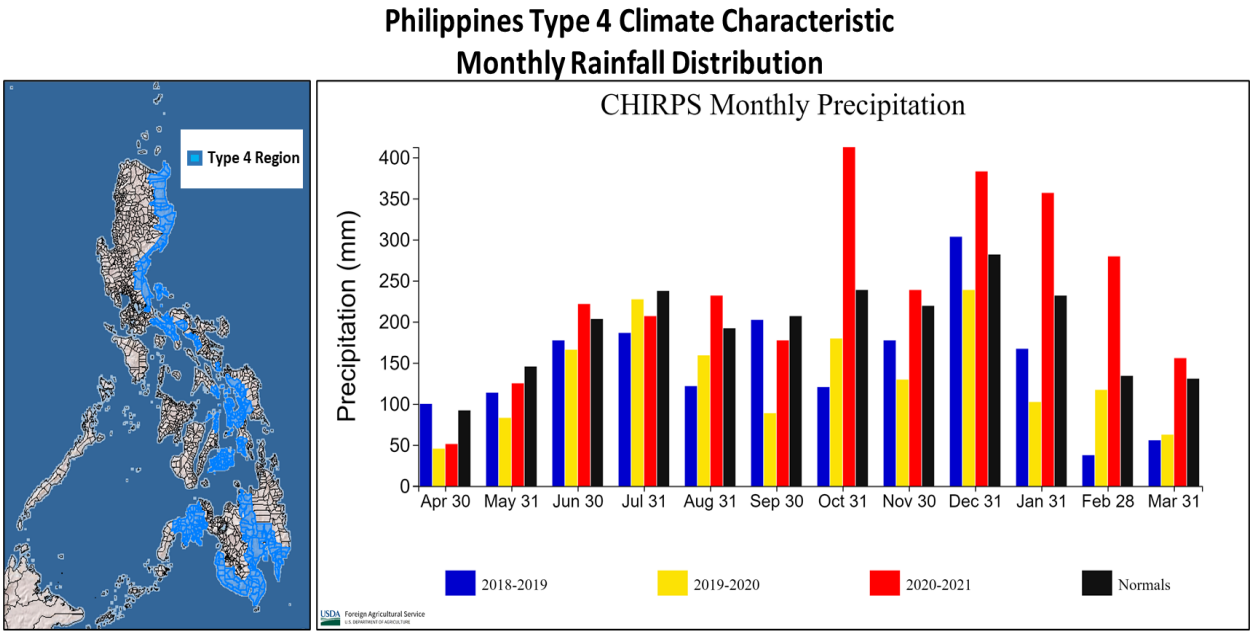

Figure 7. Philippines Type 4 climatic rainfall distribution indicating normal rainfall distribution in a comparison of 2018/19, 2019/20 and 2020/21. Source Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS).

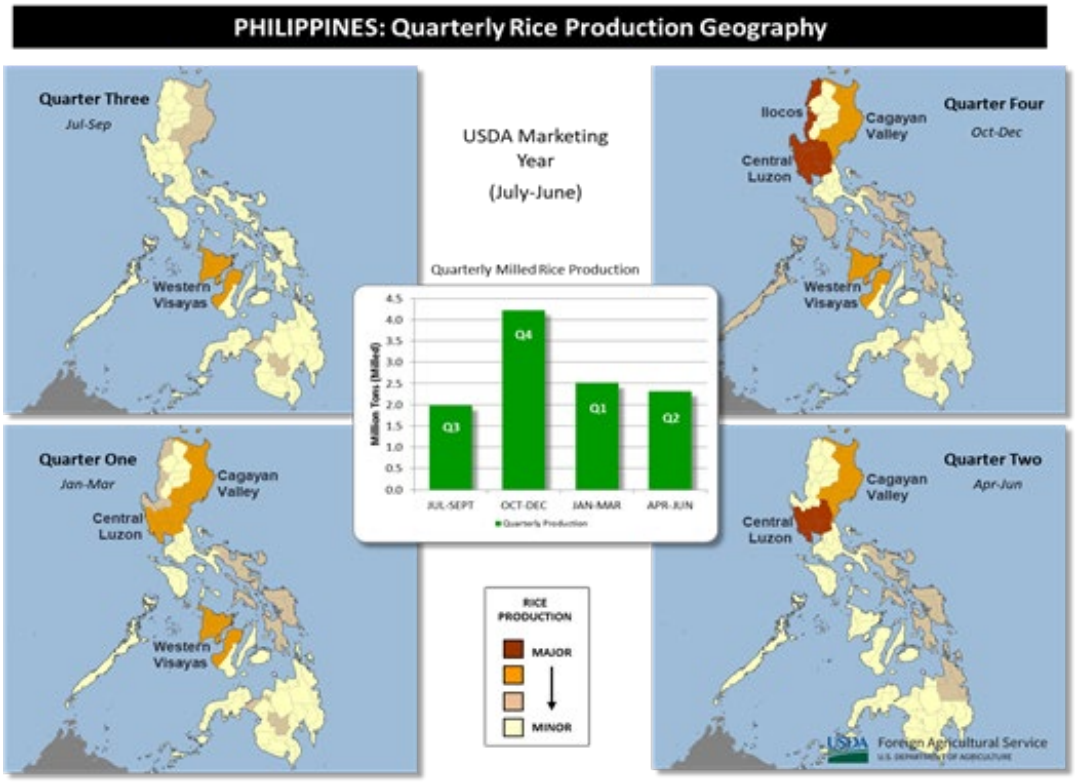

Figure 8. Quarterly Philippines rice production with associated main producing regions for each quarter. Source: Phillipine Statistical Agency.

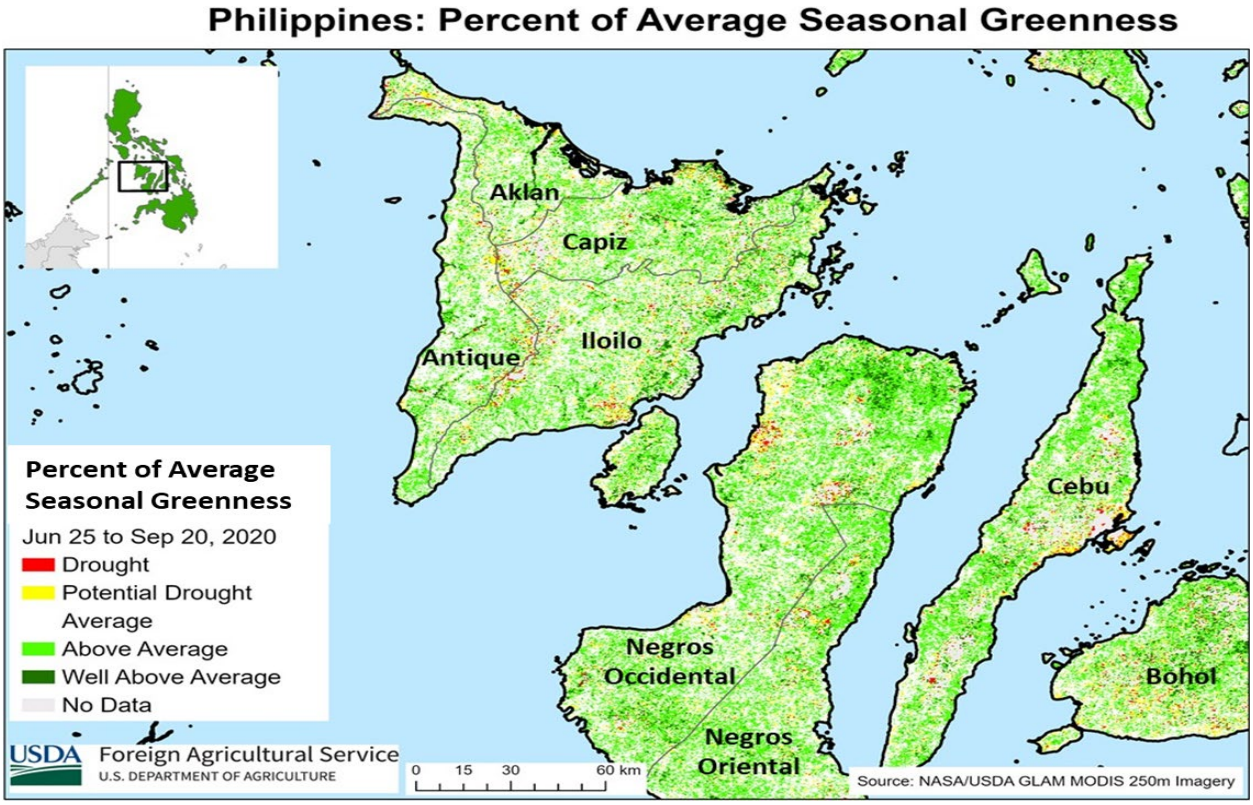

Figure 9. Percent of Average Seasonal Greeness (PASG) highlighting Western Visayas, the main rice producing region for quarter three. PASG vegetative indices depict above average to well above average biomass in comparison to the historical average supporting higher yields for this growing period.

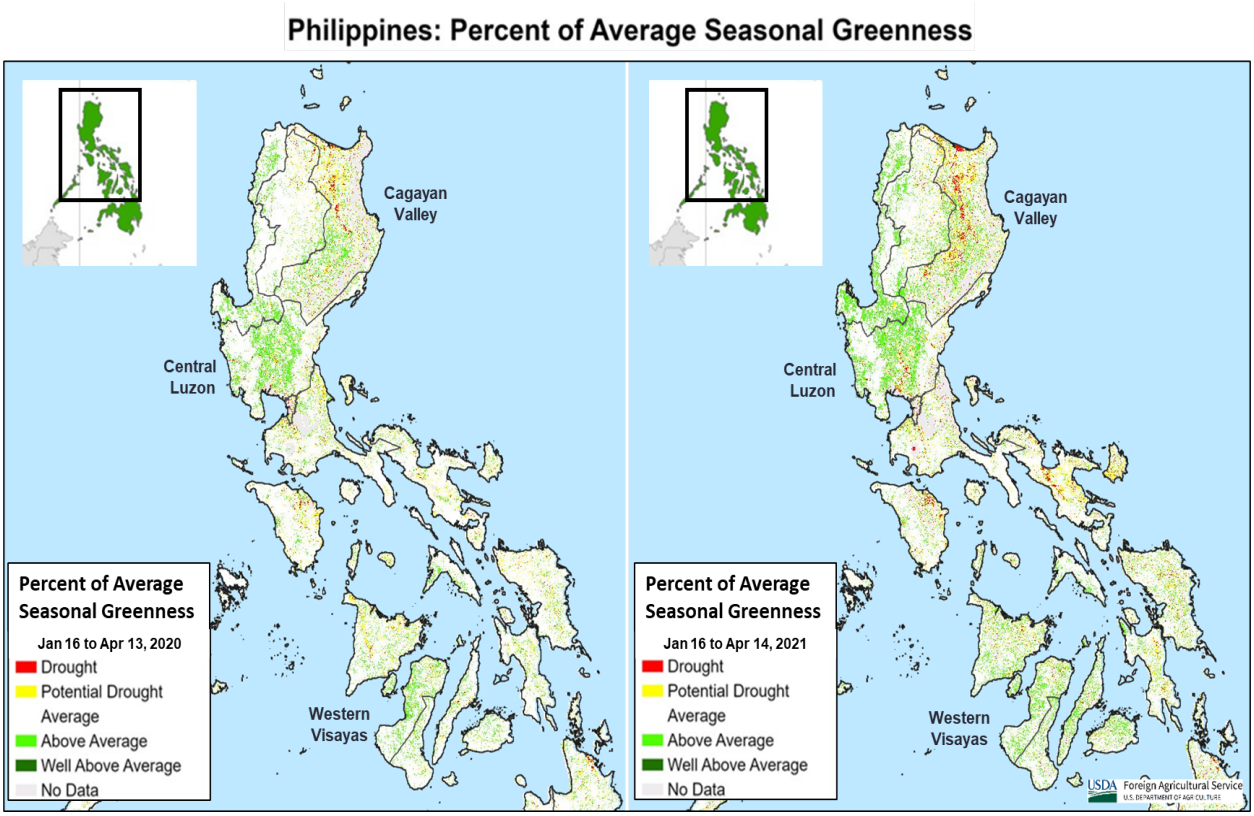

Figure 10. Percent of Average Seasonal Greeness (PASG) highlighting Cagayan Valley, Central Luzon, and Western Visayas, the main rice producing regions for quarter one. PASG vegetative indices depict above average to well above average biomass in comparison to the historical average supporting higher yields for this growing period.

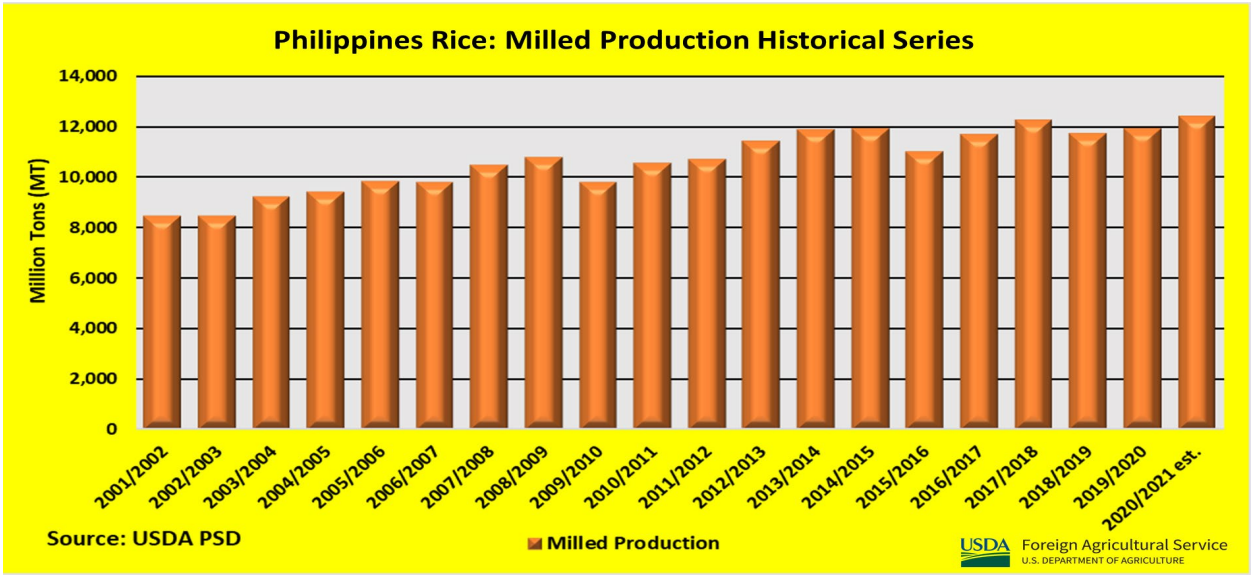

Figure 11. Philippines rice milled production historical series. Source USDA PSD.

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