



Required Report: Required - Public Distribution **Date:** April 07,2020

Report Number: ID2020-0006

Report Name: Grain and Feed Annual

Country: Indonesia

Post: Jakarta

Report Category: Grain and Feed

Prepared By: Sugiarti Meylinah

Approved By: Garrett Mcdonald

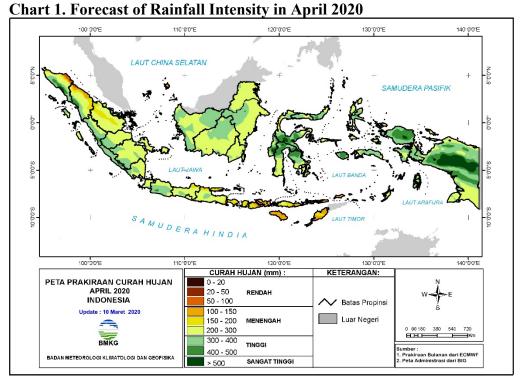
Report Highlights:

Indonesia's wheat imports are expected to decline in 2019/20 due to weaker demand as a result of the ongoing COVID-19 pandemic, rebounding to 10.95 million tons in 2020/21. Continuing challenges in managing Fall Army Worm are impacting corn yields and expected to decrease production to 11.9 million tons in 2019/20. Harvested area and production for milled rice are revised to reflect new crop production data published by the National Statistics Agency.

SECTION I. SITUATION AND OUTLOOK

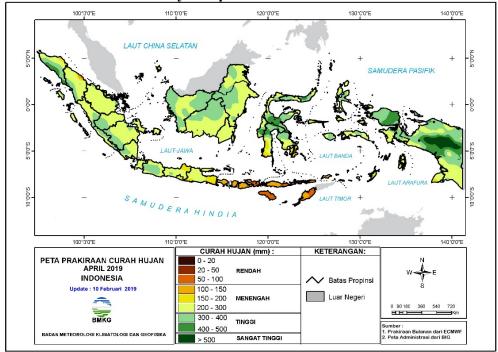
Consistent with the Indonesian Meteorology, Climatology, and Geophysics Agency (*BMKG*, *Badan Meteorologi*, *Klimatologi*, *dan Geofisika*) forecast for the onset of 2019/20 rainy season as published in August 2019, 75 percent of Indonesian area started the rainy season in late November 2019. The onset is later than the normal 30 years average of October of each year. With lower rainfall intensity at the beginning of the season, farmers in most Indonesian rice and corn producing areas of East Java, Central Java, West Java, and Lampung delayed the first crop cycle by two to three months to January 2020, in line with BMKG prediction of the rainy season peak. In February 2020, BMKG predicted Indonesian climate will not be affected by El Nino. Therefore, 2020 dry season will start at the normal time from April or May through October 2020. Rainfall intensity is expected to be in line with the 30-years average.

Delayed first plantings may reduce opportunities for farmers on low-land semi-irrigated area to grow paddy during the third crop cycle. Less water availability will drive these farmers to switch to secondary crops such as corn, soybeans, or mung beans while farmers on upland rain-fed area may leave land barren.



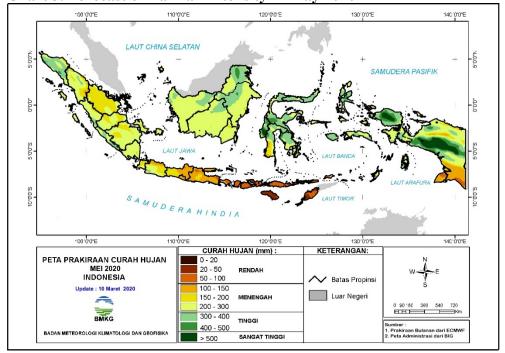
Source: BMKG

Chart 2. Rainfall Intensity in April 2019



Source: BMKG





Source: BMKG

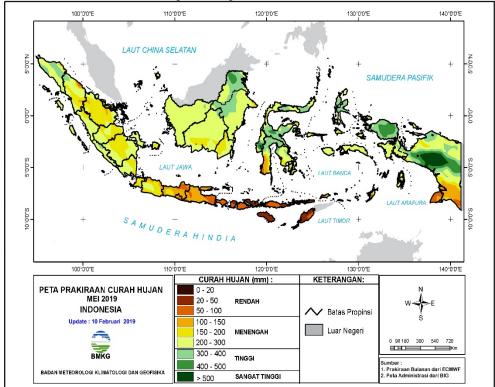


Chart 4. Rainfall Intensity in May 2019

Source: BMKG

In order to achieve food self-sufficiency goals, at the beginning of the first term of President Joko Widodo, the Government of Indonesia (GOI) set targets to establish 65 water reservoirs, construct new irrigation canals covering a total of 1,000,000 hectares, and to rehabilitate irrigation canals covering 3,000,000 hectares of agriculture area. As of 2019, 29 new water reservoirs have been established, new irrigation canals cover a total of 1,005,402 hectares and a total of 3,021,105 hectares have rehabilitated irrigation canals. The additional water reservoirs and canals are expected to increase total agricultural area covered by irrigation systems to 7.9 million hectares, an 11 percent increase from the capacity in 2015. According to the Indonesian Ministry of Public Works (MPW), approximately 60 percent of Indonesian harvested rice area was irrigated, while the remaining 40 percent was rain fed.

With the arrival of rainy season, major reservoirs in Java reported normal levels of water elevation. The water volume is expected to be able to supply water for paddy fields close to the reservoirs.

Table 1. Water Elevation at West Java Water Reservoirs, March 19, 2020

		D					
NT.	D ·	Reservoir Volume	Ta	arget	Obs	served	C 1'4'
No.	Reservoir	Volume	Elevation	Volume	Elevation	Volume	Condition
		(Million m ³)	(m)	(Million m ³)	(m)	(Million m ³)	
1	Jatiluhur	1325.40	95.10	447.62	98.71	n/a	Normal
2	Cirata	668.12	210.61	201.23	215.65	n/a	Normal
3	Saguling	530.75	633.08	159.48	639.17	n/a	Normal

Source: Indonesian Min. of Public Works, (March 20, 2020), processed by FAS/Jakarta.

In late February 2020, the Indonesia Central Bank (Bank Indonesia) revised its estimate of economic growth from 5.1 percent to 5 percent due to global economic slowdown and COVID-19 pandemic. Following the official announcement from GOI on confirmed cases of COVID-19 in Indonesia, GOI has implemented various measures to reduce to the spread, including limiting travel, social distancing and banning large gatherings. The overall stress on the economy can be seen in the weakening Rupiah, which reached Rp. 16,273 to the dollar, approaching levels last seen during the 1998 financial crisis. Given the global scale of the pandemic, Indonesian economic growth is expected to fall well below 5 percent in 2020.

Wheat

Wheat imports for 2019/20 are estimated to decrease to 10.8 million tons to reflect lower wheat flour for food consumption as a result of the COVID-19 pandemic, compared to the previous estimate of 11.0 million tons. A rebound in consumption in 2020/21 is forecast to modestly increase to imports to 10.95 million tons. In line with the estimated decline of domestic corn production, wheat for feed consumption is estimated to increase to 2.0 million tons in 2019/20. Wheat for feed consumption is forecast to remain stable at 2.0 million tons in 2020/21.

Corn

Corn production is expected to decline from 12.7 to 11.9 million tons in 2019/20 due to prolonged dry season in 2019 and Fall Army Worm (FAW). Corn import restrictions remain in place for feed use, although considering the urgency to stabilize prices of main commodities during the COVID-19 pandemic, GOI is considering allowing imports. Corn imports for 2020/21 are forecast to decline to 850,000 tons as impacts of the pandemic subside and overall production increases.

Rice

Post has revised both harvested area and production for 2018/19, based on new, credible crop production data published by the National Statistics Agency (BPS). Milled rice production is expected to increase to 34.9 million tons in 2020/21 due to greater use of high yielding varieties and increasing ability for

crop intensification on irrigated low-land areas on Java. Imports of non-specialty varieties remain likely in 2020 as the country seeks to stabilize food prices during the COVID-19 crisis.

WHEAT

Production

Indonesia does not produce wheat domestically and is fully reliant on wheat imports to fulfill demand for wheat flour-based food and as an ingredient for poultry and livestock feed.

Trade

The global economic slowdown and lower Indonesian economic outlook as a result of the COVID-19 pandemic is expected to decrease 2019/20 wheat imports to 10.8 million tons from the previous estimate of 11.0 million tons. Wheat imports are forecast to grow modestly, in line with the population growth, to 10.95 million tons in 2020/21

As big players are purchasing smaller mills, currently twenty-eight flour mills operate under ten companies across Indonesia. Total 2019/20 installed capacity is 12.6 million tons per annum, an increase from 11.8 million tons in 2018/19. Most of the mills are located on Java. Three new flour mills are expected to start operation in Riau, North Sumatera, and Banten in 2021. Following the official announcement of confirmed cases of COVID-19, the number of people infected with the virus grows exponentially. In order to curb the spread, GOI has implemented measures to promote social distancing such as urging people to work from home, study at home, and worship at home, cancellation of large public events, closures of malls, restaurants, food stalls and catering operations. Accordingly, wheat flour consumption slowed. Running capacity of mills is estimated to decline to 60 -70 percent from 80 percent in 2018/19. Due to the crisis, the industry is estimated to decline by approximately five percent in 2019/20.

Imports of corn for feed use remain restricted to BULOG (GOI State-owned Procurement Agency) for distribution to small-holder farmers. Imports are normally only allowed when prices spike due to shortages from domestic supply. Regardless of production volume, domestic corn seasonal supply and high prices compared to the international prices force some mills to source other feed ingredients to meet energy demand in feed rations. As a result, post expects flour mills to import approximately 2 million tons of wheat for re-sale to domestic feed mills in both 2019/20 and 2020/21. Most of the imported wheat for feed comes from the Black Sea region, as prices remain more competitive than other origins.

The significant expansion of flour mills has led to fierce competition in the market and has become a major factor in determining the source for imports. The surge in wheat imports to replace high-priced domestic corn in feed rations, as well as improved quality of wheat from non-traditional origins, have altered the sources of Indonesia's wheat imports. During the period of July 2019 to January 2020, Ukraine and Argentina dominated the market with 37 and 21 percent market share, respectively. U.S. market share reached 7 percent during the same period, just behind Australia (8 percent). Phyto-sanitary recognition has become the only barrier for other wheat suppliers such as Germany, French, Romania, and Kazakhstan to enter Indonesian market. Industry reported that even though the fire problems is

overcome, Indonesia is unlikely to buy more from Australia as price will continue to become the major factor determining decision to import.

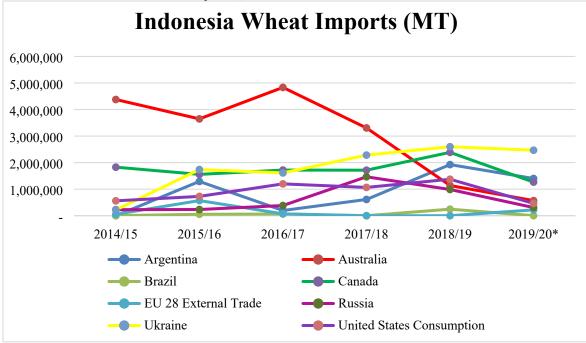


Chart 5. Indonesia Wheat Imports, 2014-2020

Source: Trade Data Monitor, March 2020.

Domestic flour dominated the market throughout 2018/19, with a 99.9 percent market share. Nonetheless, wheat flour imports during the period of July 2019 to January 2020 increased by 51 percent to 47,856 tons compared to 31,728 tons in the same period of 2018/19. Turkey held the largest wheat flour market share (47 percent), followed by Ukraine with 39 percent market share.

2019/20 as well as 2020/21 wheat product exports are estimated to decrease to 250,000 tons due to declining shipments related to COVID-19 outbreak. During the period of July to December 2019, wheat products were exported to Malaysia (26 percent), the Philippines (9 percent), and Australia (7 percent).

Consumption

Regardless of corn production, feed mills continue to include wheat as a key ingredient in feed rations. Therefore, 2019/20 and 2020/21 wheat consumption demand for feed is estimated to be stable at 2.0 million tons.

In 2018/19, annual per capita wheat flour consumption reached an estimated 30 kg, an increase from 25 kg per capita during 2017/18. A large urban population and growing middle class continue to diversify daily diets with more wheat flour-based foods such as breads, pizza, and pasta. Nonetheless, the COVID-19 outbreak and resulting global and local economic slowdown is expected to reduce wheat consumption for food. Wheat consumption for food is estimated to decline by 5.0 percent to 8.2 million

tons in 2019/20. Recovery from the COVID-19 crisis is not expected to take place immediately that the 2020/21 wheat flour consumption is forecast to remain stagnant at 8.2 million tons.

END USER PROFILE OF WHEAT FLOUR Big and Modern **Bakery** Industry 23% 31% **Biscuits** 4% Cake 2% Traditional cake Retailer Wet noodle Pastry Pancake 10% 6% 21% 2% 1%

Chart 6: End User Profile of Wheat Flour

Source: APTINDO.

Two-thirds of Indonesian flour users are considered Small and Medium Enterprise (SME), characterized as traditionally managed, family-owned, and community-oriented business. These include small scale wet noodle makers, street food vendors, low-end bread and bakery businesses, and traditional Indonesian cake makers. The other third are large enterprises, including several publicly-listed companies, with advanced production facilities and professional management. These producers include instant noodle manufacturers, high-end bakeries, and cookie and biscuit manufacturers. The growth of the industry has recently come from the small and medium enterprises, driven by new recipes and innovations of products to the market.

Flour production costs have increased with higher electricity and Indonesia's weakening exchange rate. As the COVID-19 crisis continues to put pressure on the rupiah, prices for flour in retail markets have begun to increase. Popular brand Segi Tiga Biru has increased from Rp. 9,917/kg (\$609/ton) on March 18, 2019 to Rp. 10,900/kg (\$669/ton) on March 22, 2020.

CORN

Production

Weather and pest problems are significantly impacting corn production in 2019/20. Indonesia normally experiences dry season from April to October and rainy season from October to April. Although some areas only have two planting seasons, most regions normally offer three planting periods. Across much of Indonesia the first corn season normally takes place from October to February (49 percent); the

second from March to June (37 percent); and the third from July to September (14 percent). A prolonged dry season that lasted through December 2019 delayed the first 2019/20 crop cycle to January 2020. Recent Post field observations have indicated that in order to receive sufficient water from rainfall during the already delayed upcoming second crop cycle, and to prevent from having to sell at cheaper prices during the peak of the first cycle harvest, some farmers in major corn producing areas such as Lampung, Central Java, and East Java are harvesting corn early at 90-95 days. The practice leads to higher corn moisture content of 35-39 percent compared to 25-30 percent when corn is harvested at optimal maturity of 110-115 days. As many of the corn growing areas are rain-fed, growing corn during the third crop cycle depends on water availability. The delayed first planting and harvest is likely to reduce the opportunity for farmers on rain-fed areas to grow corn during the third crop cycle.

In order to ensure stable supply and prices, on February 10, 2020, the Ministry of Trade (MOT) issued regulation number 7/2020 on Buying Reference Prices at Farmer's Level and Selling Reference Prices at Customer Level for several commodities. The regulation sets the reference prices for corn as follows:

Table 2. Corn Reference Prices.

		Ref. Prices at	Ref. Prices at
No.	Commodity	Farmer's Gate	Consumer's Gate
		(Rp./Kg)	(Rp./Kg)
1.	Moisture content 15%	3,150	4,500
2.	Moisture content 20%	3,050	
3	Moisture content 25%	2,850	
4.	Moisture content 30%	2,750	
5.	Moisture content 35%	2,500	

Source: MOT Regulation No. 7/2020.

Selling price of corn with 15 percent moisture content at mills level is set at Rp. 4,500/kg (\$277/ton). Currently, the first main harvest is ongoing. Average prices of corn at farmers level have declined from Rp. 3,800/kg (\$233/ton) in November 2019 to Rp. 2,800/kg (\$172/ton) by March 6, 2020. However, with expected shortages and seasonal supply declines, as well as numerous middlemen within the value chain, average prices of corn at the mill level remain high at Rp. 4,300/kg (\$264/ton) as of March 6, 2020; compared to an average price of Rp. 4,350/kg (\$267/ton) in November 2019. Prices at the farmer's level are expected to continue declining as the main harvest progresses.

Nationally, Java remains the largest corn producing area, contributing 40 percent of national corn production, followed by Sulawesi (24 percent), Sumatera (24 percent), and Nusa Tenggara (10 percent). Farmers are reporting more incidents of Fall Army Worm (FAW) than in 2019, especially in Lampung, East Java, and East Nusa Tenggara. Although most of the infected crops manage to recover, average yield is expected to decline. Additionally, the price of seed has increased from an average of Rp. 430,000/5 kg bag (\$26.4) in November 2019 to an average of Rp. 470,000/5 kg bag (\$28.9) in March 2020, further straining farmers ability to purchase effective crop protection. Efforts to minimize the impact of FAW by applying pesticide combined with the increasing prices of seed have increased corn production cost by 20 percent. The combination of depressed selling prices and increased production cost have forced some farmers in Lampung to switch to cassava or other secondary crops which requires less inputs. Opportunities to increase corn area may come from farmers switching from paddy to corn on semi-irrigated low-land areas during the second and third crop cycle of 2019/20.

Table 3. Provincial Corn Area Impacted by Major Pest and Disease (2019, 2020)

Tuble 0. 1 Tovinciai Com Are	Corn (ha)								
Province	Infec	eted	Fail to 1	Harvest					
	2019	2020 *)	2019	2020 *)					
Aceh	3,515	381	-	-					
North Sumatera	8,808	680	-	-					
West Sumatera	366	3	0	-					
Riau	585	35	-	-					
Jambi	447	12	32	1					
South Sumatera	1,999	451	-	-					
Bengkulu	347	82	3	-					
Lampung	5,554	9,028	-	-					
Bangka Belitung	-	-	-	-					
Riau Islands	-	-	-						
Jakarta	-	-	-	-					
West Java	784	2,315	-	-					
Central Java	7,473	1,632	12	1					
Yogyakarta	372	227	-	-					
East Java	7,625	20,564	73	11					
Banten	566	293	346	-					
Bali	31	396	-	-					
West Nusa Tenggara	1,316	7,605	-	-					
East Nusa Tenggara	1,472	18,498	-	2					
West Kalimantan	1,108	84	11	-					
Central Kalimantan	21	7	-	-					
South Kalimantan	84	74	-	-					
East Kalimantan	852	150	-	-					
North Kalimantan	-	-	-	-					
North Sulawesi	857	446	-	-					
Central Sulawesi	3,051	598	3	9					
South Sulawesi	2,114	3,448	18	-					
Southeast Sulawesi	1,477	3,034	-	32					
Gorontalo	3,595	7,695	0	191					
West Sulawesi	5,299	1,159	4	-					
Maluku	57	3	-	-					
North Maluku	42	75	-	7					
West Papua	155	15	-	-					
Papua	272	153	-	-					
Indonesia	60,243	79,142	503	254					

Source: Ministry of Agriculture, March 21, 2020. Note: *) For the period of January to February 2020. Based on the abovementioned factors, 2019/20 corn harvested area is estimated to slightly decline to 3.8 million hectares compared to the previous estimate of 3.9 million hectares. Due to the FAW-related declining yields, 2019/20 corn production is estimated to decrease to 11.9 million tons. Assuming no delayed rainy season, farmers on semi-irrigated low-land area will have an opportunity to grow paddy during the second crop cycle of 2020/21. Accordingly, corn harvested area is expected to decline to 3.7 million hectares. However, as a result of more farmers utilizing best practices for managing FAW, 2020/21 production is forecast to increase to 12.05 million tons.

Consumption

The feed mill sector consists of 97 feed mills, with an installed capacity of 25.5 million tons, an increase of 3.2 percent from 24.7 million tons in 2018. Feed mills are running at 80 percent of the total installed capacity. Approximately 69 mills are located on Java.

Table 4. Indonesian Feed Mills Capacity (Including Aquaculture)

Area	Plants	Capacity (MMT/year)
North and West Sumatera	12	2.78
Southern Sumatera and		
Lampung	6	1.44
West Java and Jakarta	34	8.82
Central Java	10	2.24
East Java	25	7.055
Kalimantan	3	800
Sulawesi	7	1.545
Total	97	24.68

Source: Indonesian Feed Producers Association (Asosiasi Produsen Pakan Indonesia, APPI), 2018.

The poultry industry consumes approximately 86 percent of domestic animal feed supplies; aquaculture, 8 percent; and cattle and swine, the remaining 6 percent. Due to the fluctuating prices of poultry products, MOT regulation no, 7/2020 also sets up buying prices of chicken meat, day old chicks, and eggs as follows:

Table 5. Poultry Products Reference Prices

		Ref. Prices at	Ref. Prices at
No.	Commodity	Farmer's Gate	Consumer's Gate
		(Rp./Kg)	(Rp./Kg)
1.	Broiler Meat		35,000
	- Floor Price	19,000	
	- Ceiling Price	21,000	
2.	Eggs		24,000
	- Floor Price	19,000	
	- Ceiling Price	21,000	
3.	DOC Broiler		
	- Floor Price		5,000
	- Ceiling Price		6,000
4.	DOC Layer		
	- Floor Price		8,000
	- Ceiling Price		10,000
5.	Pullet		90,000

Source: MOT No. 7/2020

To support the MOT regulation, and in order to ensure a balance of supply and demand of day old chicks, on February 20, 2020, Ministry of Agriculture (MOA) issued a circular letter on hatching eggs. The letter requires integrated poultry farmers to withdraw a total of 15 million of 19-days old hatching eggs from hatching machine every week for the period of February 4 – 29, 2020. The policy is expected to reduce day old chick production by approximately 40 million head by the end of March 2020. At the end of December 2019, integrated poultry farmers produced a total of 262.9 million hatching eggs. The policy, combined with lower consumption due to COVID-19, is expected to lower overall poultry meat production in 2020. Therefore, Indonesian feed producers association expects no growth in feed production, with volumes stable at 20.5 million tons.

The high prices of domestic corn have reduced feed mills' profit margins. In addition, seasonal supply shortages will likely maintain the percent of corn in feed rations at 35 - 40 percent, compared to 50-60 percent in 2016. The gap is often filled by wheat and premixes.

Table 6. Average Composition of Feed Formulation (In percent).

Animal Species	Corn	Soybean Meal	Rice Bran	Wheat Pollard	Animal By Products	CGM	Palm Kernel Meal	Palm Oil	DDGS
Broiler	40	25	15	0	5	10	2	5	0
Layer	50	20	10	0	5	3	3	2	4
Poultry									
Breeder	50-55	20-22	13	5	0	1-2		2-3	1
Swine	40-42	15	18	15	5-6	0	8	1-2	0
Aquaculture	0	30-40	13-14	20	5-6	3	2	2	7
Dairy Cattle	0	0	23-25	15	0	0	10	0	5

Source: APPI, processed by US Grains Council.

Based on poultry association and feed industry data, Post estimates 2019 Indonesian annual consumption of poultry meat at 14.34 kg per capita, an increase of 12.6 percent from 12.73 kg per capita in 20181. The overall consumption remains low compared to neighboring Malaysia which consumes 46.5 kg/year.

Additional installed corn milling capacity is expected to increase consumption for food, seed, and industrial use by 2.5 percent to 4.0 million tons from 3.9 million tons in 2018/19. The corn wet milling industry, with a total capacity of 600,000 tons per year, remains the primary importer of corn due to higher starch levels from imported dent corn as opposed to locally grown flint corn. Permission to import corn for industrial use is closely monitored by MOT and requires import permits only available to industrial processors. Only countries with approved aflatoxin laboratory facilities, such as Brazil, Ukraine, Argentina, and the United States are eligible to export to Indonesia. Corn for food consumption continues to decrease by 6.33 percent per year, as fewer Indonesians consume corn as a staple food.

Accordingly, 2019/20 and 2020/21 corn consumption for feed is estimated to remain stagnant at 9.0 million tons. Corn consumption for food in 2019/20 is estimated to increase marginally to 4.0 million tons due to the expansion of wet mills. Overall recent crisis which reduces consumption, 2020/21 corn consumption is forecast to remain stable at 4.0 million tons.

Trade

Anticipating corn price increases due to a shortage of domestic corn production, GOI is considering allowing imports of corn for feed use. Combined with higher demand from corn wet mills, 2019/20 corn import is estimated to increase to 1.0 million tons. Corn imports in 2020/21 are forecast to decline to 850,000 tons, reflecting increased in corn production and will mainly be earmarked for wet mill use.

Total corn imports from October 2019 through January 2020 reached 241,000 tons, a decrease of 17 percent from the same period in 2018/19. During 2018/19, corn imports originated from Argentina (73 percent), Brazil (25 percent), and the United States (1 percent). For the period of October 2019 to January 2020, Indonesia imported from Argentina (89 percent), Brazil (10 percent), and the United States (1 percent).

Indonesia exports a minimal volumes of corn. Exports for 2019/20 are forecast at 2,000 tons. In 2018/19 Indonesia exported corn to Japan (55 percent), Singapore (34 percent), and Malaysia (8 percent). Increasing demand from domestic feed mills is expected to hold 2020/21 exports stable.

RICE, MILLED

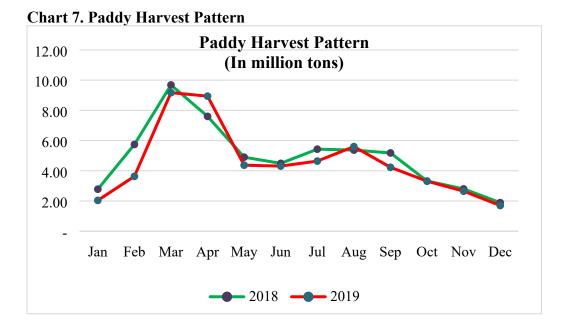
Production

The Indonesian Statistics Agency (BPS) has not published any official food crops production statistics since 2015, due to concerns over data accuracy. After years or researching and testing a new methodology for producing reliable production data for paddy production, BPS released new official

¹ OECD/FAO reported a lower consumption of 7.6 kg per capita per year in 2018.

figures in late to 2018. Working in collaboration with several government agencies including the National Land Agency and Indonesian Technology Application Agency, BPS reported that total land available for food crops cultivation in 2019 is 7.4 million hectares, a decrease from the 7.8 million hectares reported before the use of the new methodology. Approximately 60 percent of the area is irrigated, on which paddy can be grown two or three times per a year. After conferring with BPS officials regarding the methodology, which is based on area frame surveys, satellite imaging, and field observation, Post has significantly greater confidence in official area and production data for paddy. Accordingly, Post revises 2018/19 rice harvested area to 11.5 million hectares and rice production to 34.2 million tons of milled rice equivalent.

Approximately 50 to 55 percent of rice production is in Java, while Sumatera and Sulawesi contribute 20 and 12 percent, respectively. Approximately 85 percent of rice production comes from irrigated paddy fields. Typically, irrigated farms are planted to paddy during the first and second crop cycles (October – February and March – June), and followed by paddy or secondary crops such as corn, mung bean, soybean, peanut, or sweet potato during the third crop cycle (July – October). Due to the delayed onset of the 2019 rainy season, many of the farmers in Java and Sumatera started the first crop planting in January 2020. The first main harvest will take place in in middle of April to May 2020. This harvest, which occurs during the rainy season, tends to produce lower yields due to high moisture content. Higher yields are usually obtained during the second and third harvest. As a consequence of the delayed first crop, the third crop cycle which normally starts in July or August will be pushed back to September or early October. During that time, some irrigated areas may not receive sufficient water to continue growing paddy. Farmers from these areas may switch to corn, which requires less water and provides better margins compared to soybean. Paddy production from farmers who continue growing paddy on the area will be carried over to 2020/21 as the harvest will take place around January 2021.



Source: BPS (Indonesian Statistics Agency).

Significant land conversion to non-agricultural uses continues to occur not only on Java but also in other regions due to infrastructure and housing development. In Lampung, for example, 1,000 hectares of the

agricultural area are expected to be lost as the government prepares to build a new provincial capital. As a result, 2019/20 paddy harvested area is estimated to decline to 11.3 million hectares compared to 11.5 million hectares in 2018/19.

Another challenge facing rice farmers is a change in GOI allocations of subsidized fertilizer. Reduced allocations of subsidized fertilizers in 2020 are likely to contribute to lower than the previously estimated production.

Table 7. Allocation and Maximum Retail Prices of Subsidized Fertilizers.

Type of Fertilizers	2018		20)19	2020		
	Volume	Price	Volume	Price	Volume	Price	
	(MT)	(Rp./Kg.)	(MT)	(Rp./Kg.)	(MT)	(Rp./Kg.)	
Urea	4,100,000	1,800	3,825,000	1,800	3,274,303	1,800	
SP 36	850,000	2,000	779,000	2,000	500,000	2,000	
ZA	1,050,000	1,400	996,000	1,400	750,000	1,400	
NPK	2,550,000	2,300	2,325,000	2,300	2,688,000	2,300	
Specific NPK					17,000	3,000	
Organic	1,000,000	500	948,000	500	720,000	500	

Source: Ministry of Agriculture Regulation No. 1/2020.

Considering the above-mentioned factors and aforementioned credible update of official harvested area and production, 2019/20 rice production is estimated to slightly increase to 34.3 million tons from 34.2 million tons in 2018/19. Production is forecast to reach 34.9 million tons of milled rice equivalent in 2020/21 due to greater use of high yielding varieties and increasing ability for crop intensification on irrigated low-land areas on Java due to the operation of the new Jati Gede reservoir. No significant pest and disease problems have been reported.





Picture: Stages of standing paddy crops in Central Java and West Java in February 2020.

Source: FAS Jakarta

Consumption

In addition to utilizing a new methodology to calculate paddy production, BPS has also begun using a new methodology to calculate rice consumption. The new data includes consumption of rice outside of house. Indonesian data on per capita consumption can vary widely depending on whether only household consumption is considered as well as displacement estimates for increasing wheat-flour based food consumption. Additionally, there is a history of lower consumption numbers being quoted in order to demonstrate domestic production meeting consumer demand.

In recent years, per capita rice consumption has declined at about 0.62 percent per year as middle and upper-middle income consumers continue diversifying their diets to include more western-style foods like bread and pasta. Lower-middle income consumers continue to replace rice-based dishes with instant noodles due to ease of preparation and affordability. However, the current COVID-19 pandemic has already led to a significantly weaker rupiah and social distancing measures that are likely to impede growth of wheat-based food.

In accordance with these factors, Post revises 2018/19 rice consumption to 35.8 million tons. Rice consumption in 2019/20 is estimated to decline to 35.3 million tons as consumers continue to switch to wheat-flour based products and overall demand is likely to decline as a result of the COVID-19 outbreak. Rice consumption is forecast to remain stable in 2020/21 at 35.3 million tons. Including outside of home consumption, Post estimates 2019/20 rice consumption at 120 kg per capita.

Policy

GOI maintains a government purchasing price (*Harga Pembelian Pemerintah*, *HPP*) for paddy and rice as stated in Presidential Instruction No. 5/2015 stipulated on March 17, 2015. BULOG can only buy paddy or rice from farmers when the market price is lower than or equal to the HPP.

Table 8. Indonesia: Government Purchasing Price for Paddy and Rice 2015-Present

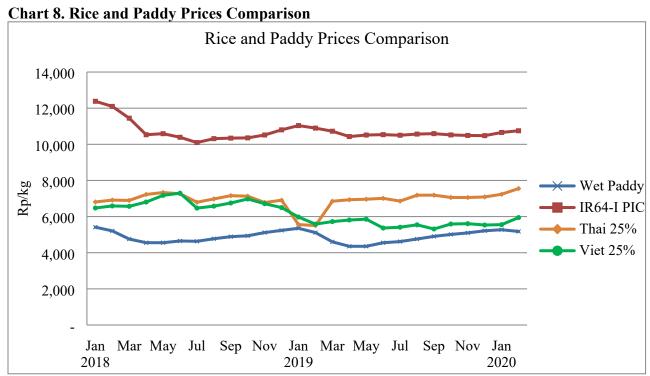
	2015				2020			
		Wet	Dry		Wet			
Quality Requiremen	ıt	Paddy	Paddy	Rice	Paddy	Dry Paddy	Rice	
Moisture Content	Max	25%	14%	14%	25%	14%	14%	
Empty Husks/Dirt	Max	10%	3%	-	10%	3%	_	
Broken	Max	-	-	20%	-	-	20%	
		Rp.			Rp.			
Price at farmer's level		3,700	-	-	4,200	-	-	
		Rp.	Rp.		Rp.			
Price at mill's level		3,750	4,600	-	4,250	Rp. 5,250	-	
			Rp.	Rp.				
Price at Bulog warehouse		-	4,650	7,300	-	Rp. 5,300	Rp. 8,300	

Source: Presidential Instruction No. 5/2015, and MOT Reg. No. 24/2020

With the upcoming main harvest and small sporadic harvest in some areas, BPS reports that prices of wet paddy at farmers level in February 2020 declined by 1.84 percent to Rp. 5,176/kg (\$318/ton)

compared to Rp. 5,273/kg (\$324/ton) in January 2020. Wet paddy prices at mill's level in February 2020 declined by 1.77 percent to Rp. 5,276/kg (\$324/ton) from Rp. 5,182/kg (\$318/ton) in January 2020.

GOI changed the scheme to support the poor by no longer providing rice but by providing non-cash food aid. Under the new scheme, the poor will receive a card with a deposited cash amount to buy rice and sugar at appointed stores. Hence, BULOG must compete with other suppliers to sell rice to the poor. In 2019, BULOG managed to sell a total of 168,000 tons of rice for the poor from an initial target of 700,000 tons. Due to the lack of adequate distribution channels, at the end of February 2020, BULOG stocks were 1.7 million tons. The new scheme has created strong demand for medium quality rice among low-income consumers in commercial markets. Combined with low supply to the market from delayed main harvest, average prices of medium quality rice at wholesale market in February 2020 was recorded at Rp. 10,750/kg (\$661/ton), an increase of 0.9 percent from Rp. 10,656/kg (\$655/ton). Prices remain above the government purchasing price.



Source: BPS, Cipinang rice wholesale market, USDA GAIN reports, processed by FAS/Jakarta.

Trade

With the high stocks currently storage, BULOG set its 2020 procurement target at 1.2 million tons, a modest increase from procurement realization of 1.19 million tons in 2019. As of March 24, 2020 BULOG had procured a total of 78,547 tons of milled rice equivalent. The domestic procurement realization is above BULOG's procurement of 59,613 tons at the same period of last year.

BULOG is required to maintain a minimum year-end stock level of 1.5 - 2 million tons. Despite the high stock, recent panic buying at the market due to the COVID-19 crisis and anticipation of higher demand

during the upcoming Ramadan, has forced GOI to consider giving BULOG authorization to import. BULOG will use the additional supply from imports to stabilize domestic rice prices. Therefore, 2019/20 rice imports are estimated at 1.0 tons, an increase from 2018/19 rice imports of 500,000 tons. In line with the expected increase of production, 2020/21 rice imports are forecast to shrink to 500,000 tons of mainly specialty rice.

PSD TABLES

Table 9. PSD: WHEAT

Wheat	2018/2019		2019/	2020	2020/2	2021		
Market Begin Year	Jul 2018		Jul 2019		Jul 2020			
Indonesia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Area Harvested	0	0	0	0	0	0		
Beginning Stocks	1720	1720	1780	1780	0	2130		
Production	0	0	0	0	0	0		
MY Imports	10934	10934	11000	10800	0	10950		
TY Imports	10934	10934	11000	10800	0	10950		
TY Imp. from U.S.	1374	1374	0	1350	0	1000		
Total Supply	12654	12654	12780	12580	0	13080		
MY Exports	274	274	300	250	0	250		
TY Exports	274	274	300	250	0	250		
Feed and Residual	2000	2000	1900	2000	0	2000		
FSI Consumption	8600	8600	8800	8200	0	8200		
Total Consumption	10600	10600	10700	10200	0	10200		
Ending Stocks	1780	1780	1780	2130	0	2630		
Total Distribution	12654	12654	12780	12580	0	13080		
Yield	0	0	0	0	0	0		
(MT/HA), (1000 MT), (MT/HA)	.000 HA), (1000 MT), (MT/HA)							

Note: Figures in the "New Post" columns are not USDA Official figures.

Corn	2018/	2019	2019/	2020	2020/2021				
Market Begin Year	Oct 2018		Oct 2019		Oct 2020				
Indonesia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post			
Area Harvested	3700	3700	3900	3800	0	3700			
Beginning Stocks	793	793	906	906	0	804			
Production	12000	12000	12700	11900	0	12050			
MY Imports	1015	1015	800	1000	0	850			
TY Imports	1015	1015	800	1000	0	850			
TY Imp. from U.S.	10	10	0	7	0	5			
Total Supply	13808	13808	14406	13806	0	13704			
MY Exports	2	2	100	2	0	0			
TY Exports	2	2	100	2	0	0			
Feed and Residual	9000	9000	9500	9000	0	9000			
FSI Consumption	3900	3900	3900	4000	0	4000			
Total Consumption	12900	12900	13400	13000	0	13000			
Ending Stocks	906	906	906	804	0	702			
Total Distribution	13808	13808	14406	13806	0	13704			
Yield	3.2432	3.2432	3.2564	3.1315	0	3.2560			
(1000 HA), (1000 MT), (MT/HA)									

Note: Figures in the "New Post" columns are not USDA Official figures.

Table 11. PSD: RICE, MILLED

Rice, Milled	2018/2	2019	2019/	2020	2020/	2021
Market Begin Year	Jan 2019		Jan 2	2020	Jan 2021	
Indonesia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	12100	11500	12000	11300	0	11500
Beginning Stocks	4163	4163	3261	3063	0	3062
Milled Production	36700	34200	36500	34300	0	34900
Rough Production	57795	53858	57480	54016	0	54960
Milling Rate (.9999)	6350	6350	6350	6350	0	6350
MY Imports	500	500	1000	1000	0	500
TY Imports	500	500	1000	1000	0	500
TY Imp. from U.S.	1	1	0	0	0	0
Total Supply	41363	38863	40761	38363	0	38462
MY Exports	2	1	2	2	0	2
TY Exports	2	1	2	2	0	2
Consumption and Residual	38100	35800	37700	35300	0	35300
Ending Stocks	3261	3063	3059	3062	0	3160
Total Distribution	41363	38863	40761	38363	0	38462
Yield (Rough)	4.7764	4.683	4.79	4.780	0	4.779
(1000 HA) ,(1000 MT) ,(MT/HA)						

Note: Figures in the "New Post" columns are not USDA Official figures.

Table 12. Harmonized Tariff Nomenclature

No.	HS Code	Description	Impor	t Duty
110.	ns Coue	Description	New	Old

1.	1001	Wheat and Meslin				
		- Durum wheat				
2.	1001.11.00	Seed	0.0	0.0		
3.	1001.19.00	Other	0.0	0.0		
		- Other				
4.	1001.91.00	Seed	0.0	0.0		
5.	1001.99	Other				
		Fit for human consumption				
6.	1001.99.11	Meslin	5.0	5.0		
7.	1001.99.12	Wheat grain without husk	0.0	0.0		
8.	1001.99.19	Other	0.0	0.0		
		Other				
9.	1001.99.91	Meslin	5.0	5.0		
10.	1001.99.99	Other	5.0	5.0		
	1005	Maize				
11.	1005.10.00	- Seed	0.0	0.0		
	1005.90	- Other				
12.	1005.90.10	Popcorn	5.0	5.0		
13.	1005.90.90	Other	5.0	5.0		
	1006	Rice				
	1006.10	- Rice in the husk				
14.	1006.10.10	Suitable for sowing	Rp. 450/kg	Rp. 450/kg		
	1006.10.90	Other		1 5		
	1006.20	- Husked (brown) rice				
15.	1006.20.10	Thai Hom Mali	Rp. 450/kg	Rp. 450/kg		
16.	1006.20.90	Other	Rp. 450/kg	Rp. 450/kg		
		- Semi-milled or wholly milled rice,				
	1006.30	whether or not polished or glazed:				
17.	1006.30.30	Glutinuous rice	Rp. 450/kg	Rp. 450/kg		
18.	1006.30.40	Thai Hom Mali	Rp. 450/kg	Rp. 450/kg		
		Other				
19.	1006.30.91	Parboiled rice	Rp. 450/kg	Rp. 450/kg		
20.	1006.30.99	Other	Rp. 450/kg	Rp. 450/kg		
	1006.40	- Broken rice				
21.	1006.40.10	Of a kind used for animal feed	Rp. 450/kg	Rp. 450/kg		
22.	1006.40.90	Other	Rp. 450/kg	Rp. 450/kg		
	1101	Wheat or meslin flour		. 8		
		- Wheat flour				
23.	1101.00.11	Fortified	10.0	5.0		
24.	1101.00.19	Other	5.0	5.0		
25.	1101.00.20	- Meslin Flour	5.0	5.0		

	1103	Cereal, groats, meal, and pellets		
		- Groats and meals		
26.	1103.11.00	Of wheat	5.0	5.0
27.	1103.13.00	Of maize	5.0	5.0
		Residues of starch manufacture and		
		similar residues, beet pulp, bagasse,		
		and other waste of sugar		
		manufacture, brewing or distilling		
		dregs and waste, whether or not in the		
	2303	form of pellets.		
		- Brewing or distilling dregs and		
28.	2303.30.00	waste	5.0	5.0

Table 13. Exchange Rate

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	13,343	13,347	13,321	13,327	13,321	13,319	13,323	13,351	13,492	13,572	13,514	13,548
2018	13,413	13,707	13,756	13,877	13,951	14,404	14,413	14,711	14,929	15,227	14,339	14,481
2019	14,072	14,062	14,244	14,268	14,362	14,141	13,913	14,237	14,174	14,008	14,102	13,901
2020	13,662	14,234	16,273									

Source: Bank of Indonesia

Note: Exchange rate is Rp. 16,273/USD 1, as of March 22, 2018.

Attachments: No Attachments