

Required Report: Required - Public Distribution **Date:** April 12, 2023

Report Number: CE2023-0003

Report Name: Grain and Feed Annual - 2023

Country: Sri Lanka

Post: New Delhi

Report Category: Grain and Feed

Prepared By: Thilani K. Kankanamge, Agricultural Specialist and Mariano J. Beillard, Senior

Regional Agricultural Attaché

Approved By: Mariano Beillard, Senior Regional Agricultural Attaché

Report Highlights:

FAS Colombo (Post) forecast's Sri Lanka's market year (MY) 2023/2024 (October-September) rice production (milled) at 3.16 million metric tons (MMT), with a planted area of 1 million hectares. Improved production volumes are premised on the country's economic recovery, facilitated through an International Monetary Fund (IMF) Extended Fund Facility (EFF) arrangement of \$2.9 billion. The IMF loan will help shore up usable foreign reserves and increase it to \$2.9 billion by-end of 2023. This will help provide the foreign currency liquidity needed to meet imports of medicines, food, and fertilizers, that were curtailed in mid-2022. Rice production partially recovered in MY 2022/2023 due to some limited imports of fertilizers, primarily urea in 2022. Sri Lanka does not produce wheat. With no domestic production of its own, Sri Lanka imports wheat for flour milling. MY 2023/2024 (July-June) wheat consumption forecast at 1.18 MMT, is up 54,000 MT, from the MY 2022/2023 estimate of 1.12 MMT.

EXECUTIVE SUMMARY

FAS Colombo (Post) forecast's Sri Lanka's market year (MY) 2023/2024 (October-September) rice production (milled) at 3.16 million metric tons (MMT), coming from a planted area of 1 million hectares, with yields of 4.26 metric tons (MT)/hectare (rough rice). Improved production volumes compared to MY 2022/2023 results are premised on the economic recovery of Sri Lanka, being facilitated through an International Monetary Fund (IMF) Extended Fund Facility (EFF) arrangement of \$2.9 billion. The IMF loan will help shore up usable foreign reserves and increase it to \$2.9 billion byend of 2023. This will help to provide the foreign currency liquidity needed to meet urgent imports of medicines, food, and fertilizers, that have been curtailed since mid-2022.

Rice production will partially recover in MY 2022/2023 thanks to some limited imports of chemical fertilizers, primarily urea in 2022. Imports of triple superphosphate (TSP) fertilizer did not arrive in sufficient quantity and time for application to the Maha 2022/2023 (September-March) season (major crop). The TSP fertilizer that landed in Sri Lanka in March 2023, however, is now available for application during the upcoming Yala 2023 (May-August) season (minor crop). Post estimates that Sri Lanka's MY 2022/2023 rice (milled) production will be 2.56 MMT as a result of the incomplete or partial application of the full basket of fertilizers (that also includes muriate of potash - MOP) required for the rice crop to thrive. The MY 2022/2023 rice crop is up by 818,000 MT, or 47 percent, with better yields of 3.77 MT/hectare compared to the previous year.

Climate change is emerging as a challenge to rice production. Observed and projected changes indicate that Sri Lanka's climate is undergoing three major changes, including the gradual increase in ambient air temperature, along with changes in rainfall distribution patterns, and an increase in the frequency and severity of extreme weather events. The country has already faced severe problems with droughts and floods. In MY 2016/2017, 29 percent of the sown area was not be harvested due to severe droughts.

There are now reports already predicting a strengthening of the El Niño (i.e., the warm phase of the El Niño-Southern Oscillation - ENSO) later in 2023, that could potentially impact Sri Lankan agricultural production and food supplies. The reappearance of the El Niño, bringing with it warmer weather in the latter part of 2023, may raise concerns on planting prospects for the Maha 2023/2024 season. The Yala 2023, summertime season, could also confront drier conditions.

Sri Lanka's MY 203/2024 rice imports are forecast at 25,000 MT, a drop of 125,000 MT from the MY 2022/2023 estimate. Post attributes declines in import volumes, compared to MY 2021/2022 levels, as a result of the country's rice production increasing with the renewed used of imported chemical fertilizers. Anticipating better paddy rice production in MY 2022/2023, the Sri Lankan government is now imposing on importers the requirement of obtaining an Import Control License (ICL) for the import of raw and parboiled rice (Nadu and Samba).

Sri Lanka does not produce wheat. With no domestic production of its own, the country for decades has been importing wheat for flour milling. Post forecasts Sri Lanka's MY 2023/2024 (July-June) wheat total consumption at 1.18 MMT, up by 54,000 MT, from the MY 2022/2023 estimate of 1.12 MMT. The increase is seen as a result of gradual recovery from the economic crisis of 2021/22, with more foreign exchange (forex) set to become available for the financing wheat imports with the IMF bailout.

COMMODITY:

RICE

Table 1. Sri Lanka: Commodity, Rice, Production, Supply, and Distribution (PSD)

Rice, Milled	2021	2021/2022		2023	2023/	2024
Market Begin Year	Oct	2021	Oct 2022		Oct 2023	
Sri Lanka	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1130	1019	1090	1000	0	1090
Beginning Stocks (1000 MT)	484	1020	622	727	0	540
Milled Production (1000 MT)	2733	1750	2525	2568	0	3162
Rough Production (1000 MT)	4019	2574	3713	3776	0	4650
Milling Rate (.9999)	6800	6800	6800	6800	0	6800
MY Imports (1000 MT)	812	812	600	150	0	25
TY Imports (1000 MT)	783	783	600	25	0	25
TY Imp. from U.S . (1000 MT)	1	0	0	1	0	0
Total Supply (1000 MT)	4029	3582	3747	3445	0	3727
MY Exports (1000 MT)	7	5	8	5	0	5
TY Exports (1000 MT)	7	5	8	5	0	5
Consumption and Residual (1000 MT)	3400	2850	3300	2900	0	3100
Ending Stocks (1000 MT)	622	727	439	540	0	622
Total Distribution (1000 MT)	4029	3582	3747	3445	0	3727
Yield (Rough) (MT/HA)	3.55	2.526	3.41	3.776	0	4.2661

(1000 HA), (1000 MT), (MT/HA).

PRODUCTION

FAS Colombo (Post) forecast's Sri Lanka's market year (MY) 2023/2024 (October-September) rice production (milled) at 3.16 million metric tons (MMT), coming from a planted area of 1 million hectares, with yields of 4.26 metric tons (MT)/hectare (rough rice). Improved production volumes compared to MY 2022/2023 results are premised on the economic recovery of Sri Lanka, being facilitated through an International Monetary Fund (IMF) Extended Fund Facility (EFF) arrangement of \$2.9 billion. The IMF loan will help shore up usable foreign reserves and increase it to \$2.9 billion byend of 2023. This will help to provide the foreign currency liquidity needed to meet urgent imports of medicines, food, and fertilizers, that have been curtailed since mid-2022.

Sri Lanka's rice production is expected to partially recover in MY 2022/2023 thanks to some limited imports of chemical fertilizers, primarily urea in 2022. Imports of triple superphosphate (TSP) fertilizer, needed for the rice crop's root development, enhancing plant resistance to disease, and improving flower

MY = Marketing Year, begins with the month listed at the top of each column.

TY = Trade Year, which for rice, milled begins in January. TY 2023/2024 = January 2024 - December 2024.

¹ On March 20, 2023, the IMF's Executive Board approved an Extended Fund Facility (EFF)) for Sri Lanka. The board's determination was based on the Sri Lankan government having completed a range of prior actions, along with key bilateral creditors providing financing assurances on debt relief. Under the EFF program, Sri Lanka is to receive in March/April 2023, \$333 million, and \$660 million each year for fours, conditional on meeting the terms of the loan.

formation and boosting seed production, did not arrive in sufficient quantity and time for application to the Maha 2022/2023 (September-March) season (major crop). The TSP fertilizer that landed in Sri Lanka in November/December 2022, however, is now available for application during the upcoming Yala 2023 (May-August) season (minor crop). Post estimates that Sri Lanka's MY 2022/2023 rice (milled) production will be about 2.56 MMT as a result of the incomplete or partial application of the full basket of fertilizers (that also includes muriate of potash - MOP) required for the Sri Lankan rice crop to thrive. Nonetheless, the MY 2022/2023 rice crop is up by 818,000 MT, or 47 percent, with better yields of 3.77 MT/hectare compared to the previous year.

High production costs continue to be a challenge for rice farmers and aggregate average paddy rice (rough) production cost per hectare has increased to Sri Lanka rupees (LKR) 200,000 (\$544) in MY 2022/2023, up from LKR 100,000 (\$508) in MY 2021/2022.³ As a result, during the Maha 2022/2023 season, many smallholder farmers, especially those in the country's wet zone, reduced their paddy rice cultivation extent due to the high cost of agricultural inputs, machinery, and labor.⁴ Many limited their rice production efforts to cover just their own household consumption needs. Some farmers, those with better access to agricultural inputs, however, did attempt to expand rice cultivation (taking over previously barren paddy rice fields) to take advantage of higher rice prices being paid out.

Previously, in MY 2021/2022, the Sri Lankan government's erroneous policy decision to ban imports of chemical fertilizers (in effect May-November 2021), decimated that market year's rice crop (see, GAIN-SRI LANKA | CE 2021-0007 | Sri Lanka Restricts and Bans the Import of Fertilizers and Agrochemicals and GAIN-SRI LANKA | CE 2022-0004 | Grain and Feed Annual – 2022). Without the application of chemical fertilizers, and relying solely on the previous season's residual fertilizer in the soil with the addition of limited amounts of organic fertilizers, the Maha 2021/2022 (October-March) crop failed to deliver the anticipated production volume. Sri Lanka's Department of Census Statistics and Department of Agriculture (DOA) sources are reporting now that rough rice production dropped 3.39 MMT, with average yields of 3.03 MT/hectare. This represents a drop of 34 percent compared to previous years' volume that had ranged 4.6-4.9 MMT. The districts of Jaffna, Vavuniya, Mullaitivu, Batticaloa, Trincomalee, Anuradhapura, and Nuwara Eliya were the areas reporting the highest declines in yields, down by 50 to 60 percent due to small-to-medium size farmers confronting limited access to agricultural inputs.⁵

Rice Planting Seasons: In Sri Lanka, rice plantings occur during the country's two main production seasons – the Maha (the main, first season) and Yala (the minor, second season). Under normal climatic conditions the Maha season (which runs September-March) produces the country's major rice crop (i.e.,

² Sri Lanka has two cultivation seasons that coincide with the two monsoon seasons. The Maha season falls during the northeast monsoon that runs normally from September to March in the following year. The Yala season is effective during the southwest monsoon period that runs from May to the end of August.

³ Sri Lanka Department of Census and Statistics.

⁴ Paddy rice refers to individual rice kernels that are in their natural, unprocessed state; it is referred to also as rough rice. Paddy rice is the rice that still has its hull (makes up 20 percent of the grain) surrounding the inner edible kernel. While most rice is prepared for consumption or further processing after the hull has been removed, some rice products use paddy as the starting material and then remove the hull during processing.

⁵ Food and Agriculture Organization (FAO) and World Food Program (WFP). FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Democratic Socialist Republic of Sri Lanka - September 2022. See, https://www.wfp.org/publications/faowfp-crop-and-food-security-assessment-mission-cfsam-democratic-socialist-republic.

60-65 percent of the annual production), with harvesting occurring in March. Water supply for rice crop cultivation is a critical factor. The Maha season ends typically in March, with the retreat of the northeast monsoon (which normally occurs in December-February/March). The rice crop's productivity is susceptible to the availability of good and timely monsoon rains.

The subsequent Yala season (running May to August) normally produces the country's minor rice crop (i.e., 35-40 percent of annual production), with an August-September harvest date. This growing season tends normally to have lower water availability deriving from the southwest monsoon (May-September), resulting often in lower plantings and by extension lower overall production.

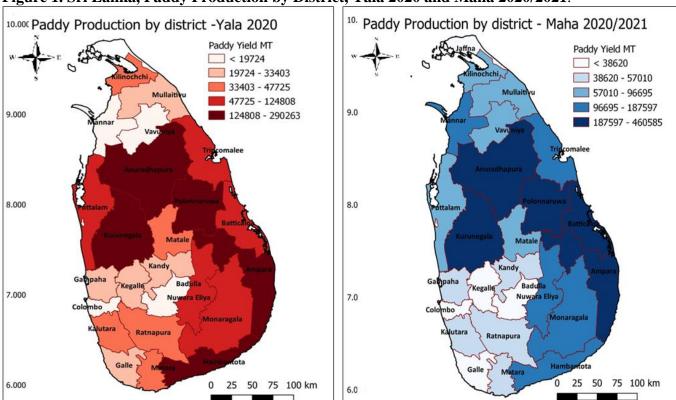


Figure 1. Sri Lanka, Paddy Production by District, Yala 2020 and Maha 2020/2021.

Note: Maha and Yala paddy production levels by administrative districts in the Eastern, Southern, North Central, and Northwestern parts of the country are the major paddy rice (rough) production areas with high productivity. Source: Department of Census and Statistics, FAS Colombo office research.

79.000

Sri Lanka's paddy rice (rough) cultivation is dependent on rainfall water, distributed under the rainfed irrigation method. The minor irrigation mode of production includes recourse to the water tanks (known locally as *Wewa*). The major mode of irrigation has reservoirs that supply water through formal control systems; handling paddy fields with extensions greater than 80 hectares.

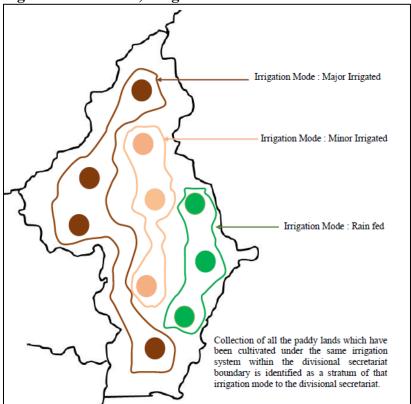


Figure 2: Sri Lanka, Irrigation Modes

Source: Sri Lanka Department of Census and Statistics.

Climate Change and Water Availability: Climate change is emerging as a challenge to Sri Lanka's rice production. Observed and projected changes indicate that Sri Lanka's climate is undergoing three major changes: 1) a gradual increase in ambient air temperature; 2) changes in distribution pattern of rainfall; and 3) an increase in the frequency and severity of extreme weather events. Sri Lanka has already faced severe problems with droughts and floods. In MY 2016/2017, 29 percent of the sown area could not be harvested due to severe droughts.⁶

There are now reports already predicting a strengthening of the El Niño (i.e., the warm phase of the El Niño-Southern Oscillation - ENSO) later in 2023, that could potentially impact Sri Lankan agricultural production and food supplies.⁷ The reappearance of the El Niño, bringing with it warmer weather in the latter part of 2023, may raise concerns on planting prospects for the Maha 2023/2024 season. The Yala 2023, summertime season, could also confront drier conditions.

⁶ State of the Economy - 2022, Institute of Policy Studies of Sri Lanka.

⁷ An El Niño event occurs every 3-5 years. A very strong El Niño occurs every 6-10 years. The event usually lasts for 9-12 months. The last strong El Niño occurred in 2015/16. The Oceanic Niño Index (ONI) is de-facto standard that the National Oceanic and Atmospheric Administration (NOAA) − U.S. Department of Commerce uses for classifying El Niño (warm) and La Niña (cool) events in the eastern tropical Pacific. It is the running three-month mean SST anomaly for the El Niño 3.4 region (i.e., 50N-50S, 120o-170oW). Events are defined as five consecutive overlapping three-month periods at or above the +0.50 anomaly for warm (El Niño) events and at or below the -0.5 anomaly for cool (La Niña) events. The threshold is broken down into Weak (with a 0.5 to 0.9 SST anomaly), Moderate (1.0 to 1.4), Strong (1.5 to 1.9) and Very Strong (≥ 2.0) events (see, https://ggweather.com/enso/oni.htm).

Fertilizer Availability: Extremely tight international fertilizer markets, coupled with Sri Lanka's limited foreign exchange reserves made it difficult to purchase foreign fertilizers for crop production. Besides rice, other key crops significantly impacted by the lack of imported fertilizers include corn (for animal feed) and the export revenue generating crops of tea, coconuts, rubber, and spices.

Russia's 2022 invasion of Ukraine disrupted international fertilizer markets, driving fertilizer prices three times higher by early 2022 compared to 2021. International donor agencies sought to assist Sri Lanka providing funding for the purchase of fertilizers (urea, triple superphosphate, and muriate of potash) for crop production. The World Bank provided \$110 million of emergency financing to purchase 133,500 MT of urea, representing 87 percent of the country's total urea requirement for the Maha 2022/2023 season. Fertilizer was distributed to farmers via Sri Lanka's Agrarian Service Centers (ASC); with farmers charged LKR 10,000 (\$27) per 50-kilogram (kg) bag. In addition, the U.S. Agency for International Development (USAID), through the Food and Agriculture Organization (FAO) of the United Nations distributed 9,300 MT of urea to 193,000 smallholder paddy rice famers at no cost. These urea fertilizer imports originated mainly from Oman, China, Malaysia, Indonesia, and Vietnam.

Meanwhile, the Asian Development Bank (ADB) diverted \$40 million from emergency assistance to procure 42,000 MT of MOP fertilizer from Canada, for application on the Maha 2022/2023 rice crop. The 50-kg bag of MOP fertilizer was provided to farmers at the cost of LKR 19,500 (\$54). Most smallholder farmers, however, could not afford to purchase the costly MOP, while those that could, were often unable to apply it in time due to distribution delays/bottlenecks. Ultimately, farmers only purchased 2,048 MT of the imported MOP fertilizer for use during the Maha 2022/2023 season.

The U.S. Agency for International Development succeeded in funding the purchase of Egypt-origin triple superphosphate. In early March 2023, a shipment of 36,000 MT of TSP landed at the Colombo Port, marking the first arrival of TSP since 2021. Although procurement challenges delayed the TSP fertilizer's arrival in time for application with the Maha 2022/2023 season, it is now available for use with the upcoming Yala 2023 season. Rice farmers across the island will receive TSP fertilizer free of charge. This Yala season, will be the first crop season in which Sri Lankan farmers are receiving the three major fertilizers - urea, TSP and MOP – needed for effective rice crop cultivation.

Post anticipates that rice yields will vary depending on fertilizer quantity usage, as well as fertilizers mix choices among farmers. During periods of higher prices, farmers often prefer to use nitrogen instead of potash and phosphate. Although the result of reduced nitrogen is readily observable during the growing season; the impact of cutting back on potash and phosphate use, and its effects on yields and soil health, can take years to materialize.¹⁰

⁸ "At the time of the Russian invasion, fertilizer prices were already at historically high levels due to high demand after lifting of the COVID-19 restrictions. On the supply side, increases in prices of natural gas and coal—key feedstocks and energy sources in fertilizer production also added upward pressure on prices. Then the outbreak of war on February 24, 2022, drove prices dramatically higher. Russia and Belarus are important producers of all three major fertilizer nutrients. In 2020, Russia accounted for 14 percent of global trade in urea and 11 percent of trade in phosphate, while jointly Russia and Belarus accounted for 41 percent of global trade in potash. The good news is that fertilizer prices, while still high, have fallen significantly from their 2022 peaks." Hebebrand, C. and Glauber, J. (2023). The Russia-Ukraine War after a Year: Impacts on Fertilizer Production, Prices, and Trade Flows. International Food Policy Research Institute (IFPRI) Blog.

⁹ World Bank Factsheet, (2022). World Bank Support to Procure and Distribute Urea Fertilizer for Sri Lanka.

¹⁰ Hebebrand, C. and Glauber, J. (2023). IFPRI Blog.

Table 2. Sri Lanka, Major Fertilizer Types Applied to Rice and Impact.

Fertilizer	Nutrient	Time of Application (Weeks after Planting)	Impact and Deficiency Symptoms
Urea	Nitrogen (N)	3 weeks, 5 weeks, 7 weeks, and 8 weeks	 Vital to improve crop growth and grain yields. Stunted plants with small yellowish green leaves and fewer tillers; lower yield due to less panicles per unit area and less grains per panicle.
Triple Super Phosphate (TSP)	Phosphorous (P)	First dressing	 Essential for root development, tillering, early flowering, and ripening. Stunted dark green plants with erect leaves and reduced tillering; thin and spindly stems; delayed maturity (and no flowering at all with severe P deficiency); and high levels of unfilled grains.
Muriate of Potash (MOP)	Potassium (K)	5 weeks and 7 weeks	 Improves root growth and plant vigor, helps prevent lodging and enhances crop resistance to pests and diseases. Stunted dark green plants with yellowish brown leaf margins and/or older leaves with necrotic tips and margins; unhealthy or black roots; greater lodging; higher level of unfilled grains; lower grain weight.

Source: Department of Agriculture of Sri Lanka. International Rice Research Institute.

What to Expect in MY 2023/2024 and Beyond: The critical requirement for bringing back Sri Lankan agricultural production to the pre-fertilizer import ban level, and in particular rice production, will be determined by farmers' access to imports of fertilizers. With the approval of the IMF loan, Sri Lanka will have the means to again procure imported fertilizers for improving MY 2023/2024 production volumes and yields. With access to foreign chemical fertilizers, FAS Colombo forecasts Sri Lanka's MY 2023/2024 paddy rice (un-milled) production at 4.65 MMT, up 23 percent from the MY 2022/2023 estimate of 3.77 MMT, and on the road to recovery from the precarious MY 2021/2022 production drop to a then low of 2.57 MMT. Productive recovery is also subject to favorable weather conditions. Post expects that production costs to marginally decrease in tandem with declines in global fertilizer prices along with an appreciation of the Sri Lankan rupee (local currency) against the U.S. dollar. 11

 $^{^{11}}$ For the Yala 2023 season, the government will lower the price of the 50-kilogram bag of MOP fertilizer from LKR 19,500 (\sim \$59.11) to LKR 10,000 (\sim \$30.31). The cost to farmers for the 50-kilogram bag of urea will drop from LKR 10,000 (\sim \$30.31) to between LKR 7,500-9,000 (\sim \$22.73 to \sim \$27.27). 1 LKR = USD \$0.00303050 (March 31, 2023). In addition, the prices of all herbicides and pesticides will drop 20 percent for the Yala 2023 season compared to the Maha 2022/2023 season.

Sri Lankan government institutions and international donor agencies are now shifting away from emergency humanitarian assistance to more sustainable long-term solutions for paddy rice production. The focus is now to increase the productivity and resilience of the rice-based ecosystems in the dry and intermediate zones by using less water and chemical inputs along with cost-effective production methods. This can potentially release upwards of 100,000 hectares in the wet zone area for other field crops, while reducing the country's reliance on imports. The Rice Research and Development Institute (RRDI) of Sri Lanka in this regard is expediting experimentation with new rice varieties and their release. These upcoming varieties benefit from better abiotic stress tolerance (i.e., improve tolerance to drought, high temperature, heat, salinity, iron toxicity, and flooding) and are intended to achieve the average productivity of 5 MT/hectare within next five years and 5.5 MT/hectares within 10 years.

Paddy Rice - Yellowing: Potassium (K) deficiency in soil has caused yellowing in paddy rice fields during the Maha 2022/2023season.

Sri Lanka, Rice Fields with Paddy Yellowing Conditions, Maha 2022/2023





Source: Rice Research and Development Institute, Batalagoda, Sri Lanka.

The Sri Lankan Department of Agriculture estimates that about 10 percent of the 770,000 hectares that came under paddy rice cultivation during the Maha 2022/2023 season were affected by yellowing. The DOA indicates that nematode or root nodule roundworm disease and other fungal diseases are diseases that can easily be contracted due to nutritional deficiencies in the crop.

CONSUMPTION

FAS Colombo forecasts Sri Lanka's rice consumption in MY 2023/2024 at 3.1 MMT, up by roughly seven percent from Post's MY 2022/2023 estimate of 2.9 MMT. The increase in consumption reflects recovery in local rice production attributable to Sri Lanka renewing the import of chemical fertilizers.

¹² The Food and Agriculture Organization (FAO) Representation in Sri Lanka along with the Sri Lankan government and the USAID aim to boost rice-based ecosystem productivity while increasing revenue for smallholder farmers.

Rice remains a mainstay in Sri Lanka's diet and lifestyle, two of every three daily meals are comprised of rice and curry. It is the staple food of the vast majority of Sri Lanka's population of 23.3 million (Central Intelligence Agency, 2023 estimate). Rice provides the population with about 45 percent of its total calories and 40 percent of the total protein requirements. On a per capita consumption basis, Post is seeing a drop in overall rice consumption in MY 2022/2023, down to about 102 kg per annum.

Sri Lanka's Household Income and Expenditure Survey (HIES) – 2019 (the most recent one), puts national level average monthly household consumption of rice at 30.7 kg. Consumer behavior differs between urban, rural, and estate plantation sectors. The estate plantation sector leads in rice consumption, with household monthly consumption at 35.9 kg. Rural household rice consumption is lower at 31.8 kg monthly, but lowest in urban areas where households have trimmed back monthly rice intake to 24.1 kg. Nadu-white is the highest consumed rice variety, followed by Kekulu Red, Kekulu White, and Samba. Consumer preferences on rice variety varies by sector. Both the estate plantation and rural sectors are large consumers consumes of Nadu White, while the urban sector favors Samba rice.

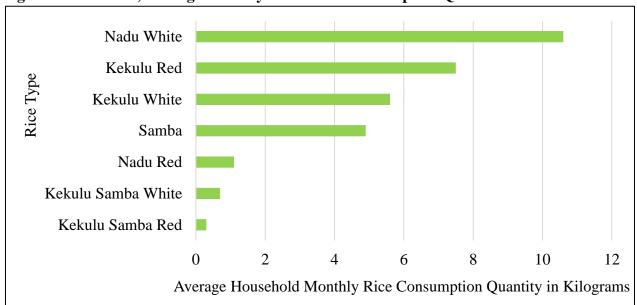


Figure 3. Sri Lanka, Average Monthly Household Consumption Quantities of Rice – 2019

Note: Kekulu is the raw rice type. Parboiled rice produced from short-grain paddy rice is known locally as Samba, while the long-grain paddy is referred to Nadu rice.

Source: Household Income and Expenditure Survey 2019, Department of Census and Statistics of Sri Lanka.

Sri Lanka's Department of Census and Statistics reports that rice consumption has been dropping even before the country's 2022 economic collapse. Surveys highlight that the average monthly household rice consumption is at declining trend over the past decades. This decrease may be attributed to a drop in household members numbers, changing lifestyle, and consumption shifting from a cereal-based diet to a more protein and vegetable rich diet, especially among the higher-income segments of the population.

The 2022 economic collapse further contributed to a scale back in consumption. The FAO and World Food Program (WFP) Crop and Food Security Assessment Report - September 2022, shows that some 8.7 million Sri Lankans (39 percent of the population) were not consuming an adequate diet in June 2022. Meals consisted of rice, vegetables, oil, and sugar; animal protein consumption decreased.

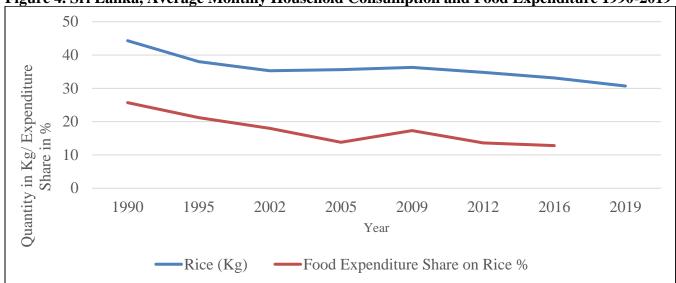


Figure 4. Sri Lanka, Average Monthly Household Consumption and Food Expenditure 1990-2019

Source: <u>Household Income and Expenditure Survey 2016 and Household Income and Expenditure Survey 2019</u>, Department of Census and Statistics of Sri Lanka.

TRADE

Imports: FAS Colombo forecasts Sri Lanka's MY 203/2024 rice imports at 25,000 MT, a drop of 125,000 MT from the MY 2022/2023 estimate. Post attributes declines in import volumes, compared to MY 2021/2022 levels, as a result of the country's rice production increasing with the renewed used of imported fertilizers. Anticipating better paddy rice production in MY 2022/2023, the government is now imposing on importers the requirement of obtaining an Import Control License (ICL) for the import of raw and parboiled rice (Nadu and Samba). The import of basmati rice remains unrestricted, but is subject to a general tariff duty rate of 15 percent or LKR 60/= per kilogram and other import duty tariffs.



Source: Trade Data Monitor, FAS Colombo office research.

Earlier in MY 2021/2022, in response to the domestic rice crop's massive production drop, the Sri Lankan government was forced to allow the import of 820,000 MT (record high) of rice, mainly from India, to supply domestic consumption. The government allowed from November 2021 onwards imports of raw rice, as well as of parboiled Nadu and Samba rice types.

Table 3. Sri Lanka, Rice, Import Control Measures and Import Duty Tariff Rates

HS Code	Description	Import Control Measure	General Duty	VAT	PAL	CESS	SSCL
1006	Rice						
1006.10	Rice in the husk (paddy or rough)	Imports Control License	15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
1006.20	Husked (brown) rice	Temporary Suspension	15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
1006.30	Semi-milled or wholly milled rice, whether or not polished or glazed:						
	Raw Rice						
1006.30.11	Basmati rice (As defined by Department of Agriculture)		15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
1006.30.19	Other	Imports Control License/ Temporarily Banned	15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
	Parboiled Rice						
1006.30.21	Basmati rice (As defined by Department of Agriculture)		15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
1006.30.29	Other	Imports Control License/ Temporarily Banned	15% or Rs.60/= per kg	15%	10%	15% or Rs.60/= per kg	2.5%
1006.40	Broken rice	Temporary Suspension	15% or Rs.100/ = per kg	15%	10%	15% or Rs.100/ = per kg	2.5%

Note: Computation formulae for import duties are available in <u>Preamble</u> of Import Tariff on the Sri Lanka Customs' website. VAT= Value-Added-Tax; PAL=Port and Airport Development Levy; SSCL=Social Security Contribution Levy; CESS=Cess levy under Sri Lanka Export Development Act.

Source: Import Tariff, Sri Lanka Customs as of March 22, 2023.

Exports: FAS Colombo forecasts Sri Lanka's Rice exports in MY 2023/2024 at 5,000 MT, a small portion of the total rice (milled) production. The major rice export destinations for Sri Lankan rice include the United Arab Emirates (UAE), Australia, Canada, and the United Kingdom, which count with numerous Sri Lankan expat workers.

Table 4. Sri Lanka, Rice Exports to World, MY 2019/2020 to MY 2022/2023

Market Year	MY	MY	MY	MY
(October/September)	2019/2020	2020/2021	2021/2022	2022/2023
Total Exported Rice Quantity (MT)	6,194	6,504	4,688	1,578

Note: MY 2022/2023 includes data only through February 2023. Source: Trade Data Monitor. FAS Colombo office research.

STOCKS

The Sri Lankan government provides no official statistics on the country's paddy and rice stocks volumes – complicating actual stock level estimations. Accusations abound that there has been hoarding by traders and that farmers have also held back rice in hopes of obtaining higher prices. The ongoing economic crisis coupled with lack available fertilizer at the correct application time have devasted rice stocks volumes. Renewed imports of chemical fertilizers will support Maha 2022/2023 production and help build up stock levels that have taken a beating in MY 2021/2022. Maha rice production output normally supplies about nine months of rice supply, while the Yala season's production provides an additional six months for a total of 15 months of supply. With rice production in recovery, FAS Colombo forecasts Sri Lanka's MY 2023/2024 rice stock volume to reach 622,000 MT.

POLICY

The Sri Lankan government normally subsidized the production of rice in pursuit of rice self-sufficiency, which is a national food security concern. In previous years, the government would import fertilizers and provide these to rice farmers in allotments sufficient to cover two hectares of paddy rice fields. Irrigation water is also provided free of charge to farmers through an extensive canal system.

MARKETING

The paddy rice (rough) marketing system in Sri Lanka consists of both the private and public sectors. However, 90 percent of paddy rice produced is picked up by the private sector directly off the fields. The government, even when it has the financial resources available, will at best absorb 10 percent of the rice production. The private sector is motivated strictly by profit, while public sector value-chain aims at delivering a service to both the producers and consumers. The biggest problem faced by the paddy rice farmers at harvest time is the very low paddy rice prices prevailing in the market. During the harvest, prices plumet below the minimum floor price due to the excess supply of paddy rice.

¹³ Japan International Cooperation Agency (JICA) and System Science Consultants Pvt. Limited (SSC). Agricultural Distribution and Marketing Network in Sri Lanka: A Report Submitted to JICA Tokyo, 2013.

Private Sector: Millers, as rice processors, are the pivotal actors in Sri Lanka's paddy rice value-chain. Paddy rice millers engage in the processes of pre-cleaning, soaking, parboiling, drying, milling desorting, polishing, grading, color sorting, and packing. The extent of these activities depend on the size and the capacity of the miller.

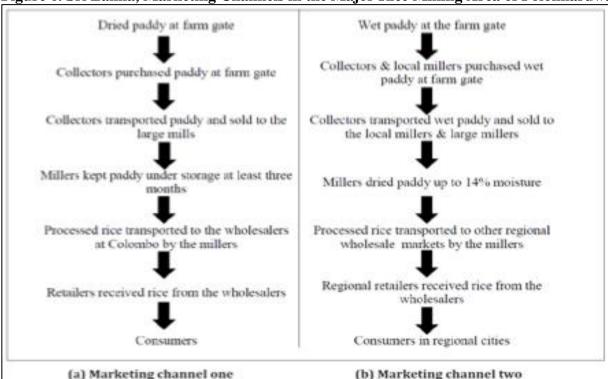


Figure 6. Sri Lanka, Marketing Channels in the Major Rice Milling Area of Polonnaruwa

Source: Wijesooriya and Kuruppu, 2022.¹⁴

Public Sector: The Sri Lankan government's Paddy Marketing Board (PMB) is structured to stabilize prices in the paddy (producers) and rice (consumers) markets. The PMB offers guaranteed prices to producers. However, recently the PMB was grappled with problems in purchasing paddy rice, due the shortage of working capital, lack of storage, and packaging material. When selling to the PMB, farmers must reduce the moisture content of their paddy rice from 22 percent to 14 percent, which requires the expenditure of additional labor and time. Given these added requirements, farmers often prefer to more quickly offload their paddy rice production to village level collectors at the harvest point.

The PMB did not purchase paddy rice (rough) during the Maha 2022/2023 season due to the lack of working capital. The government instead opted to initially purchase 66,000 MT of paddy rice through District Secretaries and Divisional Secretaries by allocating LKR 20 billion (~\$60.6 million). The rice being purchased goes to implement a government program that will provide 20 kilograms of rice (free) to 2.9 million low-income families (nearly 50 percent of population) in March through April 2023. Due

Wijesooriya, W.A.N. and Kuruppu, I.V. (2022). "Milling Economics & Concentration of Market Power in Major Rice Milling Zone Polonnaruwa, Sri Lanka." Sri Lanka Statistical Review, Department of Census and Statistics. Vol. 1 (1).
 Premaratna, S.P. and Senanayake, S.M.P. (2016). An Analysis of the Paddy/Rice Value Chains in Sri Lanka. Asia-Pacific Journal of Rural Development.

to the lack of competitive prices, farmers were compelled to sell paddy rice in the open market, where prices ranged from LKR 60-70 (~\$0.18 to ~\$0.21) per kilogram during Maha 2022/2023 season.

Prices: Food commodities' prices have been on a steady increase since the last quarter of 2021 and reached record highs in July 2022, with the food inflation rate reaching over 90 percent year-on-year. Similarly, prices of domestic rice have been increasing since October 2021 and more than doubled, from LKR 111.77/kg (~\$0.57) in June 2021 to LKR 245.73/kg (~\$0.68) in July 2022.

The price spikes are associated with tight market availability, due to the sharply reduced production in MY 2021/2022. High fuel prices for transportation and high electricity cost coupled with the compounded impact of a steep domestic currency depreciation added inflationary pressure on prices. Rice imports subsequently helped to fill the gap in domestic supply leading to lower rice prices without shortages. As of March 2023, imported rice retails for LKR 10-15 (\$ 0.03 to ~\$0.04) less than the locally produced rice.

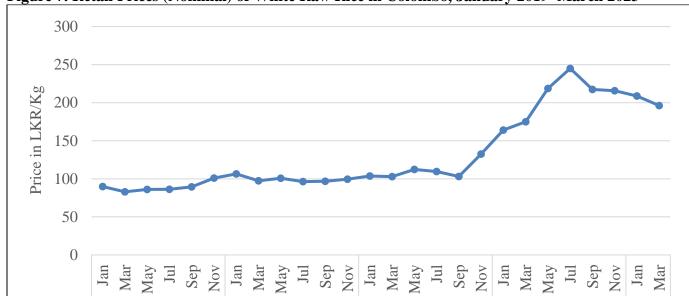


Figure 7. Retail Prices (Nominal) of White Raw Rice in Colombo, January 2019–March 2023

Source: Department of Census and Statistics, Sri Lanka.

High retail rice prices led the Sri Lankan government to set maximum retail prices (MRP) through the state-run Consumer Affairs Authority (CAA) in mid-2022 and are still effective. Notwithstanding regulations, private traders do not always conform to the government-set maximum prices. Despite government efforts to control prices, and keep rice affordable for the public, market prices in MY 2021/2022 exceeded MRP prices. However, in MY 2022/2023 current market prices of rice do not exceed the MRP due to excess supply of rice with imported rice.

Table 5. Sri Lanka, Open Market Retail Prices in Colombo - Second Week of March 2023.

	Average Price	e (LKR/Kg)	Percent Change in Price
Item	Second Week March 2023	March 2022	2nd Week of March 2023 compared to March 2022
Raw Red - (Average)	190.77	163.70	16.5%
Raw Red - No 1.	190.77	171.78	11.1%
Raw Red - Imported	-	155.63	-
Raw White local	196.21	167.56	17.1%
Raw White Imported	187.79	140.14	34.0%
Nadu - Red	224.29	174.07	28.8%
Nadu - White	210.88	167.26	26.1%
Nadu-White Imported	195.45	141.74	37.9%
Samba - (Average)	226.05	163.44	38.3%
Samba - No 1.	230.70	177.71	29.8%
Ponni Samba Imported	221.40	149.17	48.4%

Note: *Ponni* rice is a variety developed by India's Tamil Nadu Agricultural University in 1986.

Source: Department of Census and Statistics, Sri Lanka.

Sri Lanka, Rice Shop, Different Rice Types





Source: FAS Colombo office research.

Table 6. Sri Lanka, Regulation of Prices Current Maximum Retail Prices of Rice

able 0. 511 Lanka, Regulation of Trices Current Maximum Retail Trices of Rice							
Rice Types	Prices (LKR)/ kg	Effective From					
Keeri Samba-Local	260.00	May 2, 2022					
White /Red Samba - Steamed/Boiled-Local (excluding <i>Suduru</i> Samba)	230.00	May 2, 2022					
White /Red Nadu - Steamed /Boiled -Local (excluding <i>Mottaikarupan</i> and <i>Attakari</i>)	220.00	May 2, 2022					
White /Red Raw Rice-Local	210.00	June 10, 2022					

Source: State Ministry of Co-operative Services, Marketing Development and Consumer Protection – Ministry of

Trade/ Consumer Affairs Authority.

COMMODITY:

WHEAT

Table 7. Sri Lanka: Commodity, Wheat, Production, Supply, and Distribution (PSD)

Wheat	2021/2022		2022/2023		2023/2024	
Market Begin Year	Jul	2021	Jul 2	2022	Jul 2023	
Sri Lanka	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	347	347	166	166	0	150
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	1127	1102	1100	1200	0	1400
TY Imports (1000 MT)	1127	1102	1100	1200	0	1400
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	1474	1449	1266	1366	0	1550
MY Exports (1000 MT)	133	101	75	90	0	120
TY Exports (1000 MT)	133	101	75	90	0	120
Feed and Residual (1000 MT)	75	127	50	75	0	100
FSI Consumption (1000 MT)	1100	1055	1000	1051	0	1080
Total Consumption (1000 MT)	1175	1182	1050	1126	0	1180
Ending Stocks (1000 MT)	166	166	141	150	0	250
Total Distribution (1000 MT)	1474	1449	1266	1366	0	1550
Yield (Rough) (MT/HA)	0	0	0	0	0	0

(1000 HA), (1000 MT), (MT/HA).

MY = Marketing Year, begins with the month listed at the top of each column.

TY = Trade Year, which for wheat, begins in January. TY 2023/2024 = January 2024 - December 2024.

PRODUCTION

Sri Lanka does not produce wheat. With no domestic production of its own, Sri Lanka for decades has been importing wheat for flour milling. Recently the government began to allow wheat flour imports. However, the imported wheat flour quantity remains minimal compared to the import volume of wheat grain for flour milling.

CONSUMPTION

FAS Colombo forecasts Sri Lanka's MY 2023/2024 (July-June) wheat total consumption at 1.18 MMT, up by 54,000 MT, from Post's MY 2022/2023 estimate of 1.12 MMT. The increase is seen as a result of gradual recovery from the economic crisis of 2021/22, with more foreign exchange set to become available for the financing wheat imports with the IMF bailout. The renewed influx of foreign tourists in late 2022 will also fuel increased consumption as these tend to eat flour-based products rather than rice.

During the latter part of MY2021/2022 and into the early part of MY 2022/2023, wheat consumption was affected by the high price of wheat flour resulting from the lack of foreign currency availability, the rapid depreciation of the Sri Lankan rupee, and high international prices. With higher wheat flour prices

taking hold, consumers have reduced their consumption, turning to alternative sources of carbohydrates such as those derived from root-flour and even jackfruit.

At the national level, the average monthly consumption of wheat flour has been reported at 1.8 kg/month per household in Sri Lanka (in 2019). The highest consumption of wheat flour per household per month is reported coming from the estate plantation sector and from among the districts in Killinochchi, Mullaitivu, Vavuniya, Jaffna, and Nuwara Eliya. The average monthly household consumption quantity of bread is reported as 3.5 kg/month. When comparing the sectors, the households in the urban sector consume larger quantities of bread, about 5 kg/month per household.

Table 8. Household Monthly Consumption of Wheat Flour and Bread

0 1							
Description	Wheat Flour (kg)	Bread (Normal) (kg)					
Sri Lanka	1.8	3.5					
Urban	1.4	5					
Rural	1.6	3.3					
Estate Plantation	9.1	3.1					

Source: Household Income and Expenditure Survey, 2019. Department of Census and Statistics.

TRADE

Imports: Wheat and wheat flour account for the largest share of Sri Lanka's cereal imports. Large quantities of rice and corn (maize) are only imported when local production is not sufficient to cover domestic needs. ¹⁶ FAS Colombo forecasts Sri Lanka's MY 2023/2024 imports at 1.4 MMT, up by 200,000 MT, from Post's MY 2022/2023 estimated volume of 1.2 MMT. Generally, Sri Lanka's main wheat suppliers include Canada, Russia, Australia, Pakistan, India, and Romania. Due to the foreign exchange crisis, in MY 2021/2022 nearly the entire stock of wheat was imported from India facilitated by a \$4 billion Indian credit line. Currently, the importation of wheat flour for animal feed is under import control licenses and requires prior approval from the Department of Animal Production and Health. Post is revising its earlier MY 2021/2022 imports volume from 1.032 MMT to 1.102 MMT to better reflect actual wheat imports volumes.

Current import requirements disallow U.S.-origin feed wheat. Entry requirements are highly restrictive for de-husked, bulk wheat imported for animal feed production. Unlike the case of wheat imports for human consumption, where the two millers' production locations are easily verifiable by authorities, small- to medium-sized feed mills are scattered throughout the county and often lack adequate infrastructure (i.e., including silos).

¹⁶ Corn is the key ingredient used in animal feed production in Sri Lanka. According to the FAO/WFP Crop and Food Security Assessment Mission in September 2022, corn (maize) production (mostly grown during the Maha season is estimated at 187, 000 MT in the Maha 2021/2022 season. This amount is about 40 percent below the five-year average, reflecting low levels of both plantings and yields due to lack of fertilizer.

Table 9. Sri Lanka-Import Control Measures and Import Tariff on Wheat and Related Products

HS Code	Description	Import Control Measure	General Duty	VAT	PAL	CESS	SSCL
1001	Wheat and Meslin (+)						
	Durum wheat:						
1001.11	Seed		Free	Ex	5%		2.5%
1001.19	Other		Free	Ex	5%		2.5%
	Other:						
1001.91	Seed						
1001.91. 10	Wheat grain		15% or Rs.12/= per kg	Ex	5%		2.5%
1001.91. 90	Other		Free	15%	5%	25%	2.5%
1001.99	Other:						
1001.99. 10	Wheat grain		15% or Rs.12/= per kg	Ex	5%		2.5%
1001.99. 90	Other		Free	15%	5%		2.5%
1101.00	Wheat or Meslin Flour						
1101.00. 10	Of wheat		15% or Rs.16/= per kg	Ex	10%		2.5%
1101.00. 90	Other		15%	15%	10%		2.5%
	Cereal Groats, Meal and Pellets						
	Groats and meal:						
1103.11	Of wheat	Temporary Suspended	15%	15%	10%	30%	2.5%
	Starches						
1108.11	Wheat starch		15%	15%	10%	15%	2.5%
1109.00	Wheat Gluten, whether or not dried		Free	15%	10%		2.5%

Note: Computation formulae for import duties are available in <u>Preamble</u> of Import Tariff on Sri Lanka Customs Website. VAT= Value Added Tax; PAL=Port and Airport Development Levy; SSCL=Social Security Contribution Levy;

CESS=CESS levy under Sri Lanka Export Development Act. Source: Import Tariff, Sri Lanka Customs as of March 22, 2023.

Table 10. Total Wheat Imports and Exports to Sri Lanka

Item	MY 2016/2017 (MT)	MY 2017/2018 (MT)	MY 2018/2019 (MT)	MY 2019/2020 (MT)	MY 2020/2021 (MT)	MY 2021/2022 (MT)	MY 2022/2023 (MT)
Wheat Imports to Sri Lanka from World	1,077,856	1,369,696	1,043,684	1,249,503	1,474,853	1,102,948	532,679
Wheat Exports from Sri Lanka to World	59,251	52,111	69,565	84,014	71,411	101,481	41,290

Note: MY 2022/2023 data includes only through February 2023; Wheat imports and exports include wheat grain, flour, and processed products using wheat like pasta and couscous.

Source: Trade Data Monitor.

Exports: FAS Colombo forecasts Sri Lanka's MY 2023/2024 wheat product exports at about 120,000 MT, up by 30,000 MT compared to Post's MY 2022/2023 estimated quantity of 90,000 MT. The higher export volume going forward, compared to that of previous years, is premised on the increase in wheat imports for flour milling resulting from access to adequate forex currency available for financing imports. The Sri Lankan market has been saturated with domestically milled wheat flour. Even during the economic crisis in 2021/22, Sri Lanka managed to export nearly 0.1 MMT of excess wheat flour production to neighboring and regional foreign markets. Post is amending its previous forecasted MY 2021/2022 export volume from 15,000 MT to 101,000 MT. The main export destinations include the Maldives, Thailand, Malaysia, and Singapore.

STOCKS

FAS Colombo forecasts Sri Lanka's MY 2023/2024 wheat ending stocks at 250,000 MT. With wheat imports increasing, along with marginal increments in consumption combined with a slower pace in exports, ending stocks should again commence to rise. Some wheat for flour milling will go into storage, contributing to rising stocks numbers.

Wheat Flour Milling: In Sri Lanka there are only two flour millers (Prima Ceylon Ltd., and Serendib Flour Mills) operating (milling wheat for human consumption). These millers are responsible for most of Sri Lanka's annual wheat imports. With a 3,600 MT/day milling capacity, the larger of the two millers, accounts for the bulk of Sri Lanka's flour milling. Sri Lanka has excess milling capacity that outpaces domestic demand for wheat flour. [Note: The largest milling facility has 350,000 MT storage capacity]. A significant volume of Sri Lanka's wheat imports in previous years was making its way to other Asia-Pacific region countries as milled wheat flour exports.

POLICY

Sri Lankan agricultural policy has focused over the years on achieving national self-sufficiency in rice production. It has favored rice production over wheat imports. Given the staunch political-economic support for rice production, wheat consumption has been increasing marginally. Imported wheat is milled under highly controlled conditions at the port-of-entry (Colombo and Trincomalee). Wheat flour products pasta and roti (that is, the round flatbread native to the Indian subcontinent) is often used to feed estate plantation workers and their families.

MARKETING

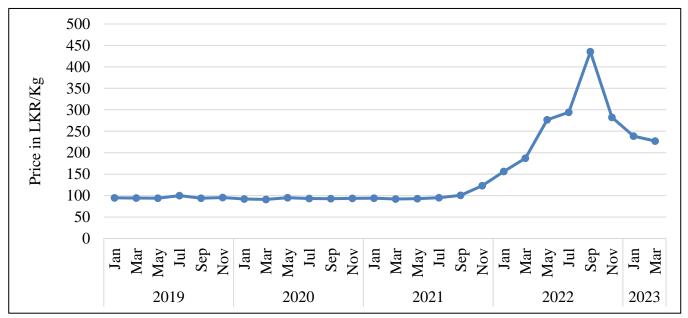
Prices: The rapid Sri Lankan rupee's depreciation in 2022 contributed to rapid increase in wheat flour and wheat flour-based products prices. In Colombo, the retail price of one kilogram of wheat flour went up nearly fourfold, going from LKR 100.64 (~\$0.51) in September 2021, to LKR 435.42 (\$1.22), up 332 percent by September 2022. This spike in prices occurred at the time when rising global wheat prices also made it more difficult for the forex starved Sri Lankan economy to finance wheat imports for flour milling.

Table 11. Retail Price of Wheat Flour in Main Markets in Colombo District - March 2023

	Average Price	e (LKR/Kg)	% Change in Price 2nd Week of March 2023 compared to		
Item	Second Week March 2023	March 2022	March 2022		
Wheat Flour	227.20	171.11	32.8 %		
Bread	170.00	95.42	78.2 %		

Source: Department of Census and Statistics of Sri Lanka.

Figure 8. Sri Lanka, Wheat Flour Retail Prices (Colombo), 2019-2023



Source: Department of Census and Statistics of Sri Lanka.

Attachments:

No Attachments