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# **Report Name:** Grain and Feed Annual: Extreme Water Shortages and Policy **Changes Impact Iraq Grain Production**

**Country:** Iraq

Post: Baghdad

Report Category: Grain and Feed

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# **Report Highlights:**

Continued drought and water shortages is affecting economic activities in Iraq, especially grain production in 2022. The Iraqi Ministry of Agriculture cut agricultural cropping in irrigated areas to 50 percent less than the previous year due to shortages in surface water. Post forecasts MY 2022/23 wheat production to be 3.25 million metric tons, much less than previous seasons, which will drive up imports. Sharp increases in the price of food items and agriculture inputs in local and international markets, in addition to the devaluation of the Iraqi Dinar and the lifting of agricultural subsidies, add to the constraints on production. However, grain and feed demand continues to rise.

# **WHEAT**

2020/2	2021	2021/2	2022	2022/2	023
Jul 20	20	Jul 2021		Jul 2022	
USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
2400	2945	2000	2372	0	2170
1187	1187	897	1901	0	1674
4635	6238	3500	5473	0	3250
2175	2176	2600	2200	0	3400
2175	2176	2600	2200	0	3400
0	0	0	0	0	0
7997	9601	6997	9574	0	8324
0	0	0	0	0	0
0	0	0	0	0	0
400	700	250	700	0	680
6700	7000	6300	7200	0	7300
7100	7700	6550	7900	0	7980
897	1901	447	1674	0	344
7997	9601	6997	9574	0	8324
1.9313	2.1182	1.75	2.3073	0	1.4977
	USDA Official 2400 1187 4635 2175 2175 00 7997 00 00 00 400 6700 7100 897 7997	2400         2945           1187         1187           4635         6238           2175         2176           2175         2176           0         0           7997         9601           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           100         7000           897         1901           7997         9601	Jul 20         Jul 21           USDA Official         New Post         USDA Official           2400         2945         2000           1187         1187         887           4635         6238         3500           2175         2176         2600           2175         2176         2600           2175         2176         2600           0         0         0           0         0         0           7997         9601         6997           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         700         6300           7100         7700         6550           897         1901         447           7997         9601         6997	Jul $\ge$ Jul $\ge$ USDA OfficialNew PostUSDA OfficialNew Post24002945200023721187118789719014635623835005473217521762600220021752176260022000000996016997957400	Jul $\geq$ Jul $\geq$ Jul $\geq$ Jul $\geq$ USDA OfficialNew PostUSDA OfficialNew PostUSDA OfficialI2400294520002372011187118789719010146356238350054730121752176260022000121752176260022000121752176260095740100000111000000011000000011017000633072000110171007000655079000110179979601699795740110171007000655079000110179979601699795740110179979601699795740110179979601699795740110179979601699795740110279979601699795740110379979601699795740110499979957495740111059997957495741111059

#### **Table 1: Wheat Production, Supply, and Distribution**

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

TY = Trade Year, which for Wheat begins in July for all countries. TY 2022/2023 = July 2022 - June 2023

Wheat is the main cereal produced in Iraq, accounting for 70 percent of total cereal production in the country. The bulk of rain fed cultivation is concentrated in the north – Ninewah, Kirkuk, and Salah Al Din governorates - while most irrigated cultivation occurs in the central southern and eastern regions of the country – Wasit and Qadissyia governorates. Planting begins in October and November and the harvest generally begins in April, extending into June in some areas. The wheat is grown on both irrigated and rain fed lands, split almost half and half.

Wheat is considered a strategic crop and the government invests considerable resources into domestic production in the form of subsidized inputs and direct purchase of harvests. The Ministry of Agriculture (MOA) also determines the wheat production areas each growing season through its National Annual Agricultural Plan. In previous seasons, farmers who grew wheat outside this plan did not gain the same access to subsidized inputs, must sell their wheat at reduced prices, and were not eligible to market their product to silos run by the Ministry of Trade (MOT). However, this strategy changed due to the recent global crisis in the grain market and the government has now allowed all farmers to sell their grain to the MOT silos.

#### **Production**

Post forecasts wheat production in marketing year (MY) 2022/23 to be 3.25 million metric tons (MMT) on extreme water shortages, very low rainfall early in the growing season, and policy changes on farmer input subsidies resulting in lower yields. MOA also announced a reduction in agriculture growing areas due to water scarcity.

Post revises down MY 2021/22 production from 7.26 MMT to 5.47 MMT, a 24.6 percent drop based on official data. Low production yields due to insignificant rainfall and unfavorable weather also contributed to lower production in MY 2021/22.

Post estimates harvested area for MY 2022/23 at 2.17 million hectares (ha). The MOA's planned wheat cropping area for MY 2022/23 for the Central and Southern Iraq regions (C&S) is 2.32 million ha. Planned cropping area for the Kurdistan region (KRI) has not yet been released, but it is estimated to be the same as the previous MY, at 780,380 ha. Total planned planted area will likely be around 3.1 million ha, approximately 11 percent less than MY 2021/22. Producers harvested less than 70 percent of last year's planned planted in the C&S, and Post estimates the same for the forecast year due to persistent weather conditions. Less than half of the planned planted area in the C&S region will be in rain fed zones.

#### Weather Impacts Production in MY 2021/22, Expected to Continue in MY 2022/23

Extreme water shortages due to high temperatures, unprecedented drought, climate change, and water extraction from the Tigris and Euphrates rivers led to lower crop yields that is expected to continue in the forecast year, putting a heavy strain on wheat production. Iraq relies on the Tigris and Euphrates rivers for nearly all of its water needs. Both these rivers flow into Iraq from Turkey and the Tigris is supported from Iran. Turkey and Iran have both constructed dams that block or divert water from the main rivers and springs that support both rivers, creating major water shortages in Iraq that impact agricultural production.

Though Iraq increased its wheat planted area in MY 2021/22 by 10.4 percent compared to the previous season, the harvested area, due to low water availability, was much lower, reaching as low as 25 percent in the hardest hit governorate. Unlike most seasons where the rain fed zones normally contribute the highest percentage of the total wheat production, for MY 2021/22 it was the opposite. Due to low rainfall, the irrigated areas contributed to nearly all of Iraq's wheat production in the C&S, 4.1 MMT or 97.7 percent, even though it made up less than two thirds of the planted area. The governorate of Wasit ranked first in production producing 19.1 percent (See Table 2).

Governorate	Total Planted Area	Total Harvested	<b>Production (MT)</b>				
	(Ha)	Area (Ha)					
Central and Southern Region (C&S)							
Ninevah	922,377	239,761	392,156				
Kirkuk	170,385	111,244	330,501				
Diala	154,334	151,229	416,901				
Anbar	70,259	65,864	202,754				
Baghdad	38,630	38,630	116,225				
Babylon	75,749	75,735	270,195				
Karbala	18,409	18,246	72,327				
Wasit	276,473	275,903	809,645				
Salah-Aldeen	184,733	166,828	417,138				
Al-Najaf	52,429	52,017	111,418				
Al-Qadisiya	177,855	177,855	510,651				
Al-Muthnna	65,201	59,465	132,230				
Thi-Qar	82,532	82,532	248,639				
Maysan	65,861	65,664	174,512				
Al-Basra	10,832	10,832	28,422				

#### Table 2: MY 2021/22 Wheat Production, Harvested and Total Area

C&S TOTAL	2,366,056	1,591,803	4,233,714
Kurdistan Region (K	(RI)		
Erbil	235,313	235,313	349,493
Dohuk	225,431	225,431	297,399
Sulumanyia	284,182	284,182	519,990
Kalar	19,850	19,850	41,684
Halabja	15,604	15,604	31,208
KRI TOTAL	780,380	780,380	1,239,774
<b>GRAND TOTAL</b>	3,146,436	2,372,183	5,473,488

Source: Iraqi Central Statistics Office for C&S, FAS research for KRI

Since October 2021, the start of Iraq's wheat sowing season for MY 2022/23, there has been very little rainfall over most of the country. In late January 2022 however, rain and snow began to fall in some parts of Iraq, especially in the mountain regions of Kurdistan and the northern governorates, namely Nineveh and Kirkuk, but it will likely not be enough to make up for the season. It should also be noted that there is no double-cropping in the same area for wheat, neither in irrigated nor in the rain fed zones.

#### Ministry of Agriculture (MOA) Policy Changes

The MOA incentivizes farmers to follow its planting plan for wheat by allowing them access to subsidized inputs as well as improved marketing through the Grain Board of Iraq, within in the MOT.

In MY 2021/22, the MOA changed its policies regarding subsidizing inputs for farmers (i.e., fertilizers, seeds, and aerial pesticide spraying). Previously, farmers operating within the MOA annual plan received certified and registered seeds at a subsidized rate of 70 percent. This rate has now been reduced to 30 percent. Fertilizer subsidies also changed from 30 KG/*donum* (120 KG/Ha) to 5 KG/*donum* (20KG/Ha). Most farmers refused to acquire the fertilizers due to its small amount and the bureaucratic challenges involved to receive it.

Wheat fields in Iraq are prone to smut infestation which require annual aerial pesticide spraying by MOA. However, due to a shortage of spare parts, the aerial spraying will not take place this season and farmers must spray their fields manually using pesticides provided by MOA free of charge. Post estimates that the reduction in subsidized inputs of improved seeds, fertilizers, and aerial pesticide spraying for Iraqi producers will contribute to lower yields in MY 2022/23. The changes in farmer input subsidies is summarized in Table 3 below.

Item description	Original Subsidy	Current Subsidy
Aerial spraying of wheat fields against smut	Complete spraying free	No aerial spraying,
	of charge by the MOA	provision of pesticides free
		of charge
Fertilizers	30 KG/donum (120	5 KG/donum (20 KG/Ha)
	KG/Ha)	
Seeds (certified and registered seeds)	Subsidized by 70 percent	Subsidized by 30 percent

#### Table 3. Summary of Input Subsidies

# Consumption

Post forecasts MY 2022/23 total consumption to reach 7.98 MMT, a slight increase from MY 2021/22 estimates. Though Post forecasts FSI consumption to rise in line with annual population growth and eating habits, feed wheat consumption will likely dip in the forecast year due to tight supplies and high prices. Feed wheat in Iraq is supplied by domestic sources.

Iraq has a population of 41.6 million (January 2022) and the country's Public Distribution System (PDS) accounts for a large percentage of Iraqi wheat consumption, requiring an estimated 5 MMT of wheat annually. Approximately 75 percent of local production is used to meet this demand and the remainder is kept by farmers for personal use or sold to local feed mills. The Iraqi government announced that it only procured 3.4 MMT of local wheat in 2021 for the PDS program, short of the 5 MMT collected the previous year. The Iraqi government also purchases international wheat to supply its PDS program.

The PDS gives a ration of wheat flour of 9 KG/person, on average eight times per year. This is an estimated annual consumption of 3 MMT of wheat flour. Created in September 1990, the PDS provides beneficiaries access to a range of staple foods and has gone through several changes since then. Before July 2021, the PDS provided only wheat flour, sugar, cooking oil and rice. However, as of July 2021, the government of Iraq changed its food ration to distribute a "food basket." The new food basket includes 1 KG of sugar, 9 KG of wheat flour, 3 KG of rice, 0.4 KG of tomato paste, 0.5 KG of legumes (beans, lentils, or chickpeas) and 1 liter of cooking oil per person every two months. Beneficiaries pay 500 Iraqi dinars (\$0.34) for each quota.

This new, more comprehensive food basket was distributed in July, September, and November 2021 and was well received by beneficiaries. The MOT announced that it will distribute the food basket three times during the month of Ramadan in 2022.

The government of Iraq introduced additional PDS reforms. Beginning June 1, 2021, the following populations will be excluded from receiving PDS rations:

- 1. Single family members with an income exceeding 1.5 million Iraqi Dinar/month (\$1,027.40/month);
- 2. Certain contractors as classified by the Ministry of Planning Classification;
- 3. Company owners registered in the official corporate registration service,
- 4. Individuals registered in the Chamber of Commerce associations up to second class, industries up to third category, business unions, as well as doctors, dentists and pharmacists' unions;
- 5. Individuals with a tax accountability over 18 million Iraqi Dinars/year (\$12,328.77/year);
- 6. Travelers outside Iraq for more than 3 months (temporarily blocked until their return is proven);
- 7. Iraqi permanent residents in other countries;
- 8. Iraqis who have citizenship in other countries;
- 9. Central prison inmates (until released), deceased inside prisons, belonging to terrorist organizations, and fleeing justice;
- 10. Arabs, foreigners, and refugees (except Palestinian families);

The new program initiative, in coordination between the MOT and the World Food Program, to change the paper ration card called *Al Butaka Al Tamwnyia* to the use of fingerprints is still only applied in a very limited region with the goal of reaching a wider scale in the future. The purpose of this program is to prevent beneficiary duplication and minimize corruption. Outside of the PDS rations, there are additional amounts of wheat consumed annually in the form of grain or flour, contributing to total consumption. Much of the wheat flour distributed under the PDS ends up either as animal or fish feed due to poor quality or because families have no ability to bake the flour/bread at home. Most families in the urban areas purchase their daily bread needs from local bakeries. These bakeries use imported flour mostly from Turkey and Iran, or they purchase the flour from families that are not able to bake the bread at home.

#### Flour Mills

There are total of about 282 licensed flour mills in Iraq located in 19 governorates. Only 3 percent of Iraq's milling capacity belong to the public sector. Much of the private sector milling capacity remains underutilized as millers point out a decline in the frequency in which mills receive grain. The State Company for Grain Processing only offers flour under the PDS on average around 8 months of the year, which leads them to halt operations for the remaining 4 months, despite having to pay operational costs all year round. Private sector mills receive wheat supplies after the public sector capacity is filled.

The Iraqi government retains ownership of wheat and products throughout the production process. MOT pays private firms \$10/MT to mill wheat for the PDS. Additionally, millers must offer 13 percent of its bran to the State Company for Grain Processing so they can sell it at public auction. This was intended to be a temporary measure, but it remains in place, creating an additional burden on the millers.

#### Trade

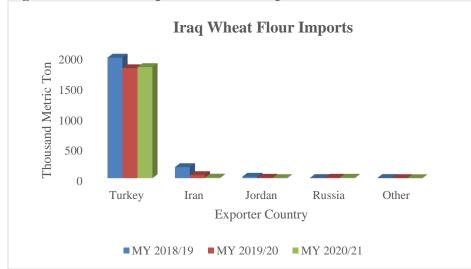
Post expects Iraqi wheat imports in MY 2022/23 to reach 3.4 MMT. This is a 1.2 MMT increase over MY 2021/22. Post revises up its previous import forecast for MY 2021/22 by 29.4 percent, to 2.2 MMT, on current import trends. Lower production in MY 2021/22 contributed to the greater need for imports to meet demand.

MY 2022/23 wheat production is expected to be less than last year due to the reduced planned planted area in light of Iraq's water shortage crisis and low rainfall. As a result, wheat imports will rise to meet demand. The MOT announced its intention to purchase 3 MMT of wheat in order to bolster its strategic reserves. There is a high chance to import wheat from the United States in light of the expected low production this season, and since the Grain Board of Iraq only imports wheat from the United States, Canada, and Australia.

# Wheat Flour Imports

Iraq continues to import sizable volumes of wheat flour, between 2.5 to 3 MMT annually, almost all of which comes from Turkey (See Figure 1). Around 100 Turkish mills produce only for the Iraqi market, specifically for Iraqi buyer's specifications and at lower costs which make it difficult for Iraqi mills to compete. Reliable statistics on cross-border trade of wheat flour is not available as large volumes of unregistered products flow into Iraq from different countries. It is estimated that the majority of wheat flour imported into Iraq is unregistered.

Figure 1: Official Iraq Wheat Flour Imports



Source: FAS Office Research

All imported wheat flour in Iraq is done by the private sector and sold to bakeries around the country. Since the start of the war in Ukraine, much of the wheat flour that has been imported from Turkey is in fact originating in Ukraine but re-packaged and labeled as Turkish wheat flour. Recently, wheat flour prices in the Iraqi market have doubled, from ID 20,000 (\$14)/50 KG bag to ID 40,000 (\$28)/50 KG bag.

#### Stocks

Post estimates MY 2022/23 ending stocks at 344 TMT. Lower production for two consecutive seasons will put downward pressure on stocks. Though Post anticipates higher imports in MY 2022/23, fiscal constraints will limit how much the government can actually purchase in international markets and hamper its ability to maintain robust stocks.

The government normally maintains a strategic reserve of 3-6 months of stocks to cover PDS wheat demand. The government also announced that it intends to keep larger stocks in light of increased market prices and unstable supply due to the war in Ukraine. The storage capacity of the Iraqi Grain Board is 4.5 MMT. Of this amount, 2.6 MMT is held in bunkers, 1.1 MMT is in silos, and the remainder is held in barns. The governorates of Baghdad and Nineveh have the largest wheat storage capacity at 588 TMT and 506 TMT, respectively. Stocks held by private millers are low due to limited storage capacity.

# Policy

#### Tenders

The Grain Board of Iraq is the only organization that imports wheat into Iraq and purchases wheat through international tenders from only three origins – United States, Canada, and Australia. Iraqi specifications require imported wheat to be free from kernel bunt and wheat smut. In January 2022, the Grain Board of Iraq awarded a tender of 150,000 MT to an Australian supplier.

# Farm Support

Locally produced wheat is sold to the MOT for milling and distribution through the PDS. Normally the price of the wheat purchased by the MOT is announced shortly prior to harvest. On March 8, 2022, the government announced a new purchase price for wheat (see Table 4). The new higher prices are a way to compensate farmers due to the government's devaluation of the Iraqi Dinar against the USD, the recent increase in oil prices in the international market, and high costs for agricultural inputs due to the change in subsidies.

Table 4: Iraqi wheat Procurement Prices						
Grade	Former Price	New Price				
First Grade Wheat	560,000 Iraqi Dinars (\$386/MT)	750,000 Iraqi Dinars (\$510/MT)				

# Table 1. Inaci Wheat Dreamont Drives

The price differential creates an arbitrage opportunity to sell lower grade, imported, or mixed wheat to the public sector. Also, when wheat in the neighboring countries is cheaper, traders smuggle wheat and sell it to the government silos at the announced price as if it is locally produced.

#### BARLEY

#### Barlev 2020/2021 2021/2022 2022/2023 Jul 2020 Market Year Begins Jul 2021 Jul 2022 USDA Official USDA Official Iraq New Post New Post USDA Official New Post Area Harvested (1000 HA) Beginning Stocks (1000 MT) Production (1000 MT) MY Imports (1000 MT) TY Imports (1000 MT) TY Imp. from U.S. (1000 MT) Total Supply (1000 MT) MY Exports (1000 MT) TY Exports (1000 MT) Feed and Residual (1000 MT) FSI Consumption (1000 MT) Total Consumption (1000 MT) Ending Stocks (1000 MT) Total Distribution (1000 MT) 1.2917 1.1667 1.3705 1.3333 Yield (MT/HA) 1.5802 (1000 HA), (1000 MT), (MT/HA) MY = Marketing Year, begins with the month listed at the top of each column

#### **Table 5: Barley Production, Supply, and Distribution**

TY = Trade Year, which for Barley begins in October for all countries. TY 2022/2023 = October 2022 - September 2023

#### **Production**

Post forecasts MY 2022/23 barley production at 280 TMT on a harvested area of 210,000 ha. MOA reduced its planned planting area for barley in MY 2022/23 to 699,829 ha. Considering the low rain fall and the reduction in the surface water discharge by the upstream countries, it is expected that no more than 50 percent of the above planned area will be harvested.

Post revises down MY 2021/22 barley production by 74 percent, to 418 TMT on official data. Similarly, harvested area is revised down from 999,000 ha to 305,000 ha, a 69 percent drop. Water shortages devastated Iraq's barley crop and the low production is expected to continue into MY 2022/23. In the C&S, total production was 267 TMT with Qadissyia governorate producing the most at 65 TMT, or 24 percent, of the crop. Barley production in the rain fed zones in this region was only 5 percent of total production. The KRI produced 151 TMT of barley in MY 2021/22.

In the C&S, the harvested area for MY 2021/22 was only 22.4 percent of the planted area.

# Crop Failure in Iraq's Largest Grain Producing Governorate

Nineveh, the largest cereal producer in the country was severely affected by drought (see Figure 2). Its entire barley area (601,606 ha planted in MY 2021/22) is rain fed and failed almost completely due to lack of rainfall. Many farmers decided to leave stunted crops for pasture for livestock farmers. Barley production in Nineveh reached 14,144 MT, from 1.76 MMT in MY 2020/21.

# Figure 2: Nineveh Governorate, Northern Iraq

# Consumption

Post forecasts total barley consumption in MY 2022/23 to reach 1.15 MMT. Post also revises down MY 2021/22 consumption by 480 TMT to 1.3 MMT on lower availability of supply.

The consumption of barley in Iraq is used primarily as animal feed for cows, sheep, and goats, more so than feed grade wheat. The drop in barley production severely impacted livestock producers in Iraq due to a sharp increase in feed prices.

There is small amount of barley flour used for human consumption and is imported mostly from Turkey and Iran.

# Trade

Post forecasts MY 2022/23 imports of barley to reach 750 TMT. Post raises MY 2021/22 barley imports to 750 TMT.

Iraq does not import substantial quantities of barley. However, MY 2021/22 production of barley was very low and insufficient to meet local market demand. As a result, MOA decided to allow the import of 1.5 MMT of barley over the next year, to be imported in two lots of 750,000 MT every 6 months. The private sector will carry out the imports against licenses issued by the MOA. Each license should not exceed 40,000 MT. Since September 2021, 400,000 MT of barley has been imported, mostly from Turkey and Syria.

In MY 2020/21, <u>Iraq exported 700,000 MT of surplus barley to Iran</u> in compensation for its debt incurred for the import of natural gas from Iran. Selling subsidized crop yields in Iraq such as wheat, barley, and corn require ministry approval.

#### Iraq Issues Decisions to Restrict the Movement of Barley

On April 15, 2021, MOA issued a number of decisions to restrict the transshipment of wheat and barley inside Iraq (specifically between the KRI in the north and the rest of the governorates) to limit the entry of crops from unknown sources. The entry of imported wheat and barley by the private sector is blocked from all border outlets until further notice, while the crops transferred to MOA-owned entities (the Mesopotamia General Seed Company and the Iraqi Seed Production Company) were excluded. The purpose is to limit the entry of crops from unknown sources, unspecified harvest seasons, unclear consumption suitability – i.e. whether intended for human or fodder use – and deter gray market trade from smugglers and speculative traders.

#### Stocks

Post forecasts barley ending stocks to reach 109 TMT in MY 2022/23. Smaller production in the current and forecast marketing years put downward pressure on stocks. In addition, because of the lower production, the market price of barley has exceeded the MOT announced prices. This, as well as the lifting of subsidies on the inputs, led many farmers to not market their barley to government silos as in previous years and instead sell their grain on the local market.

Barley is stored in two main storage facilities, one belonging to the government-owned Mesopotamian State Company for Seed Production and the other belonging to the Iraqi Seed Company, a public-private entity. Both companies also have rented spaces to store barley in different locations in the governorates. Farmers keep some of their barley on-farm as seed for the next season.

# Policy

#### Farm Support

MOA completely lifted its input subsidies on barley production in MY 2022/23. Farmers are no longer able to purchase seeds at 70 percent of its value, fertilizers at half price, or receive free pest spraying. The MOT buys barley from farmers at a set procurement price of 420,000 dinars/MT (\$290/MT) which is the same price as third grade (feed grade) wheat. Barley is then distributed to livestock farmers through a number of state-owned firms. Post expects that higher purchasing prices for barley will be put in force in MY 2022/23.

Companies affiliated with the MOA purchase domestic barley from farmers. These firms then resell the grain to farmers and fisheries as feed at a reduced rate. Animal breeders may buy up to 30 MT of barley per season. Currently, farmers pay 200,000 dinars/MT (\$138/MT) for barley. Often farmers keep a large share of their barley production for feeding livestock throughout the year. However, because of low

production, together with high demand and high market prices for barley, it will be difficult for MOA to maintain this policy of purchasing barley in MY 2022/23. The removal of subsidies plus reported delayed payments creates less of an incentive for farmers to sell their crop to the government.

# RICE

Rice, Milled	2020/2	2021	2021/2	2022	2022/2	023
Market Year Begins	Oct 2020		Oct 2021		Oct 2022	
Iraq	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	100	102	85	96	0	80
Beginning Stocks (1000 MT)	203	203	283	262	0	414
Milled Production (1000 MT)	305	309	250	282	0	238
Rough Production (1000 MT)	458	464	375	423	0	357
Milling Rate (.9999) (1000 MT)	6660	6660	6660	6660	0	6660
MY Imports (1000 MT)	1200	1200	1250	1370	0	1400
TY Imports (1000 MT)	1280	1280	1250	1420	0	1400
<b>TY Imp. from U.S.</b> (1000 MT)	87	87	0	0	0	C
Total Supply (1000 MT)	1708	1712	1783	1914	0	2052
MY Exports (1000 MT)	0	0	0	0	0	C
TY Exports (1000 MT)	0	0	0	0	0	C
Consumption and Residual (1000 MT)	1425	1450	1475	1500	0	1650
Ending Stocks (1000 MT)	283	262	308	414	0	402
Total Distribution (1000 MT)	1708	1712	1783	1914	0	2052
Yield (Rough) (MT/HA)	4.58	4.549	4.4118	4.4063	0	C
(1000 HA) ,(1000 MT) ,(MT/HA) MY = Marketing Year, begins with						

#### Table 6: Rice Production, Supply, and Distribution

TY = Trade Year, which for Rice, Milled begins in January for all countries. TY 2022/2023 = January 2023 - December 2023

Paddy rice planting in Iraq starts from the second half of May for the early varieties Meshkab 1 and Eba 1, while the planting of the late varieties – namely Amber 33, Amber Baghdad, Amber Furat, and Amber Manathera – start in June. In northern Iraq, planting of the Bazyan 56 variety begins in April and continues through the end of May. Rice harvesting takes place in October for the early varieties.

# **Production:**

Post estimates MY 2022/23 paddy production will be 357 TMT from an estimated area harvested of 80,000 ha due to an anticipated unfavorable planting season under shortage of water especially in the area where rice is cultivating in southern Iraq. The annual plan to cultivate paddy is issued on a yearly basis, normally in May, depending on the availability of water and the rainfall situation. The MOA receives clearance from the Ministry of Water Resources on the summer cropping plan, including rice. The reduction in the summer cropping plan has been announced to be at least by 50 percent, however it is expected that rice farmers will exceed this limit.

Post revises up MY 2021/22 production to 423 TMT on a harvested area of 96,000 ha based on official data. Najaf governorate had the highest production.

# **Consumption:**

Post forecasts MY 2022/23 consumption to be 1.65 MMT, 150 TMT above MY 2021/22 consumption. This is based on the estimated population of Iraq reaching 41.6 million in 2022 and the current PDS food basket rice ration at 3 KG/person/ration, though it is irregularly distributed. Rice is a major staple of the Iraqi diet and most families supplement the PDS ration with additional rice. Iraq needs 1-1.25 MMT of rice to support the PSD program annually.

Since the devaluation of the Iraq Dinar against the US dollar in late 2020, the prices of long grain imported rice has increased. In 2021, the price of imported rice in the local market saw an increase of at least about 1.5-fold, in line with price rises in the international market.

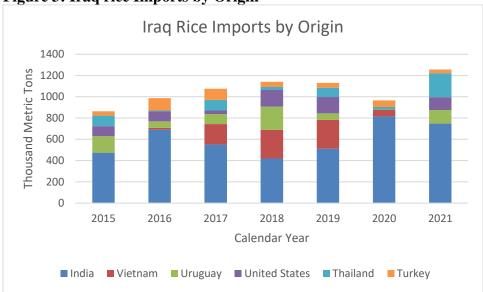
The MOT purchases locally produced rice in paddy form at two prices: ID 900,000/MT for Amber variety and ID 700,000/MT for Jasmin variety. The MOT then processes the paddy to milled rice and adds it to the PDS ration. Amber is the most popular rice variety favored in Iraq. However, production is well below the capacity to cover consumption demands. Seed companies used to pay farmers an additional 30, 20, and 10 percent above market prices for the foundation, registered, and certified seed categories respectively, but this input subsidy was lifted in 2021. With recent market price increases in rice reaching up to ID 2,000,000/MT, farmers are unlikely to sell their paddy to the government silos at the above stated prices.

# Trade

Post estimates MY 2022/23 imports to reach 1.4 MMT in order to meet domestic rice demand.

In June 2021, MOT designated Al-Awees Company for Trade, General Contracting, Food Supplies, and Food Industries Limited (Al-Awees) as the purchasing authority for rice for the government of Iraq, taking over the Iraqi Grain Board. Al-Awees holds tenders to buy long grain rice from approved origins, which include the United States, Vietnam, Argentina, Brazil, and Uruguay. However, Al-Awees imported rice from Thailand for the very first time after a seven-year hiatus. These imports supply the needs of the PDS program. In 2021, Iraq purchased 120,000 MT of U.S.-origin rice.

Long grain variety Basmati rice is mainly imported from India and other Southeast Asian counties via UAE (See Figure 3).



**Figure 3: Iraq rice Imports by Origin** 

#### Stocks

Post estimates ending stocks of rice in MY 2022/23 at 402 TMT, approximately the same as MY 2021/22 ending stocks. Due to the nature of rice infestation and unavailability of proper storage facilities, it is not recommended to keep rice stocks above a 3-month maximum. This equates to about 375 TMT in order to satisfy PDS needs.

#### CORN

#### **Table 7: Corn Production, Supply, and Distribution**

Corn	2020/2	2021	2021/	2022	2022/2	2023	
Market Year Begins	Jul 20	Jul 2020		Jul 2021		Jul 2022	
Iraq	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested (1000 HA)	75	91	77	78	0	39	
Beginning Stocks (1000 MT)	95	95	149	273	0	197	
Production (1000 MT)	365	419	360	374	0	185	
MY Imports (1000 MT)	989	989	800	800	0	1000	
TY Imports (1000 MT)	1035	1035	800	800	0	1000	
<b>TY Imp. from U.S.</b> (1000 MT)	0	0	0	0	0	C	
Total Supply (1000 MT)	1449	1503	1309	1447	0	1382	
MY Exports (1000 MT)	0	0	0	0	0	C	
TY Exports (1000 MT)	0	0	0	0	0	0	
Feed and Residual (1000 MT)	1200	1180	1050	1200	0	1230	
FSI Consumption (1000 MT)	100	50	100	50	0	50	
Total Consumption (1000 MT)	1300	1230	1150	1250	0	1280	
Ending Stocks (1000 MT)	149	273	159	197	0	102	
Total Distribution (1000 MT)	1449	1503	1309	1447	0	1382	
Yield (MT/HA)	4.8667	4.6044	4.6753	4.7949	0	4.7436	
					İ		
(1000 HA) ,(1000 MT) ,(MT/HA MY = Marketing Year, begins wi TY = Trade Year, which for Corn	th the month listed a	1		October 2022 - Se	eptember 2023		

Source: FAS Office Research

Plantation of yellow corn (zea maize) in Iraq takes place twice a year. Spring corn is planted from the first week of March until around March 20 in the South and Central Iraq but extends until the end of March in Northern Iraq. The spring corn harvest takes place from June until early July. Autumn corn planting takes place in the first half of July and harvested in the second half of November until the end of December.

# **Production:**

Post forecasts MY 2022/23 production at 185 TMT on a harvested area of 39,000 ha. MOA will release its plan for summer plantings in May 2022 once water availability is determined. But because of the low rainfall and extreme water shortages that Iraq has been facing, it is expected that planned planted area for corn will be much lower than MY 2021/22. MOA announced its plan to cut summer plantings by 50 percent.

The MOA has been promoting the higher yielding, hybrid corn variety, mostly imported by the private sector from the United States, with yields reportedly at 10 MT per hectare. Imported Turkish seeds cost 600,000-800,000 ID/MT (\$504-627/MT) while some imported hybrid seeds, known for exceptionally high yields, may reach 1,000,000 ID/MT (\$840/MT). The Iraqi government does not provide directly subsidize corn seeds, or seeds for other summer crops for its farmers.

Post revises down MY 2021/22 production slightly, to 374 TMT based on official data. Harvested area is also revised down to 78,000 ha. Corn harvests declined from previous years due to water shortages. Approximately 7.2 TMT of corn production was green feed.

#### Consumption

Post forecasts MY 2022/23 corn consumption to reach 1.28 MMT on steady investment in the poultry and aquaculture industry in Iraq.

The majority of yellow corn in Iraq is used by poultry feed mills. However, the use of corn in the aquaculture sector is steadily increasing. Demand on both sub sectors' products is growing, and therefore, it is expected to continue increase the demand during MY 2022/23. Demand that is not met by local production will be supplanted by imports. Feed mills prefer imported corn, especially South American origin, due to the quality, moisture rate, and low occurrence of aflatoxins.

#### Trade

Post estimates MY 2022/23 corn imports to reach 1 MMT due to low production and imports making up the difference to meet growing demand in the poultry and aquaculture industries.

Iraq's corn imports are typically Argentina, Romania, and Turkey origin. Turkey supplies almost exclusively northern Iraq via land routes. The government of Iraq frequently bans corn imports from November until May. The ban was designed to prevent imported corn from being mixed with domestic harvest and sold to the MOA at a profit.

Previously, MOA purchased local corn at a fixed price that is often above the international price, and distributed the corn to Iraqi farmers at a subsidized price. However, this subsidy was lifted in 2021, and farmers can sell their products in the free market. Occasionally, the government will put in place

temporary bans to protect corn farmers from low prices driven by surplus product in the market. Feed mills maintain stocks of imported corn to mill during the import ban period.

#### Stocks

Post estimates MY 2022/23 ending stocks to fall to 102 TMT. With the elimination of the corn subsidies, MOA no longer purchases corn from farmers and therefore is not maintaining any stocks. All stocks are held by private sector storage. Iraq has a limited capacity to provide good storage facilities and avoid aflatoxin.

# Policy

#### Farm Support

As of September 2021, MOA no longer purchases corn from farmers at set prices, nor dries the harvest to prepare as grain for poultry producers.

In place of the previous subsidy, MOA made an agreement with the governorate of Kirkuk, the largest producer of corn in Iraq, responsible for 70 percent of production. MOA will issue licenses to the private sector for drying and processing plants in Kirkuk, so farmers can deliver their corn to these plants to have it processed. The agreement also prohibits the transfer of processed corn outside of the governorate of Kirkuk. There is no set purchase price for corn, they are now subject to private sector market prices.

# Attachments:

No Attachments