

# Bumped Crops: Iran's Grain Imports and Geopolitical Shocks

by [Kevjn Lim \(/experts/kevjn-lim\)](/experts/kevjn-lim)

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## ABOUT THE AUTHORS

[Kevjn Lim \(/experts/kevjn-lim\)](/experts/kevjn-lim)

Kevjn Lim is a PhD researcher at the School of Political Science, Government, and International Affairs at Tel Aviv University, and a Middle East and North Africa contributor for IHS Markit.



Brief Analysis

**Despite its declarations of self-sufficiency, the country still imports large amounts of agricultural staples from abroad, leaving its food basket vulnerable to supply shocks, sanctions-related payment difficulties, environmental volatility, and other risks.**

To allay panic amid the coronavirus pandemic, Iranian officials have repeatedly confirmed the availability of basic goods in ports and buffer stocks, while President Hassan Rouhani has confidently declared an abundance of staples. Indeed, given the cocktail of COVID-19, crushing U.S. sanctions, and dwindling forex reserves, food occupies Tehran's bottom line like nothing else.

Despite increased grain production, however, the country still requires imports to meet domestic consumption and fill stockpiles, and its broader ability to handle potential supply shocks is limited by a host of internal and geopolitical challenges. For a better sense of this situation, one need only look at five key imports: wheat and rice, Iran's primary staples; barley and corn, which it mainly uses for feed and, by extension, the production of dairy products, eggs, and meat; and various oilseeds for cooking purposes, protein meal as feed, and, less commonly, industrial applications.

## STOCKING THE NATION'S GRANARIES

Wheat is Iran's most important crop, accounting for about half of its cultivated acreage and 70% of its grain output. Domestic production and demand stood at 14 and 12 million tons, respectively, in fiscal year 2019/20. The country has become increasingly self-sufficient on this front since 2016, yet wheat imports continue at relatively low volumes, mainly from Russia, Kazakhstan, and the EU. Iranian farmers sometimes balk at selling their wheat to the government at the existing guaranteed price floor (2,500 tomans per kilogram, or roughly \$500 per ton), preferring to hoard or sell at better rates as feed to livestock breeders. The government must therefore import to cover the shortfall. Of the 14 million tons produced last fiscal year, the state purchased just 8.8 million; it intends to

buy 10.5 million this year. Meanwhile, it approved the import of 3 million tons in January.

Regarding rice, Iran produced a bumper harvest of 2.9 million tons in FY 2019/20, much of it grown in rain-rich Gilan and Mazandaran provinces. Yet domestic consumption in less exceptional circumstances still requires around one million additional tons per year, so imports continue, with India at the forefront and smaller volumes coming from Pakistan, Thailand, Turkey, and the United Arab Emirates. To protect its farmers, Tehran imposes import bans or steep tariffs during the annual rice harvest (August-October).

Barley is Iran's second-largest crop by acreage, with 3.6 million tons produced in FY 2019/20. Here again, though, demand requires another 3 million tons in imports, mainly from Kazakhstan, Russia, Ukraine, and the EU. Corn production is scantier, so Iran imports nearly 10 million tons annually, mostly from Brazil, with trace volumes from Argentina, Ukraine, and even the United States. Feed imports (corn, barley, and soybean meal) reportedly rose by 16% over the past fiscal year; current domestic demand is 21 million tons.

Iran also cultivates oilseeds, yet it still needs to import over 90% of its demand for vegetable oils (about 1.5 million tons), particularly soybean, sunflower, and palm. Imports of soybeans, the main oilseed crop, come mostly from Brazil, though shipments from the United States skyrocketed to nearly 900,000 tons in October 2018 after China raised tariffs on American soybeans. Iran imported about 2.3 million tons of soybean seeds in FY 2019/20; it also imports over half of its soybean meal (feed) and nearly two-fifths of its consumed soybean oil.

According to a joint forecast by the Organisation for Economic Co-operation and Development and the UN Food and Agriculture Organization, Iran will still be importing 656,000 tons of wheat in the year 2028, along with 1.4 million tons of rice, 10.3 million tons of corn, 4 million tons of other coarse grains including barley, 2.7 million tons of soybeans, 282,000 tons of other oilseeds, and 1.7 million tons of vegetable oils. In other words, true self-sufficiency is likely years away.

## UNCERTAIN SUBSTITUTES

Iran's main suppliers for these imports are Russia, Kazakhstan, India, Ukraine, Brazil, Argentina, and the EU.

Russia exports nearly a fifth of the world's wheat; other major exporters include the EU, the United States, Canada, Ukraine, Argentina, and Australia. As Eurasian Economic Union members, Russia and Kazakhstan enjoy a preferential trade regime with Iran, which includes a five-year trilateral agreement to sell wheat there (intended for private Iranian millers who are not permitted to draw on domestic stocks, to produce flour for re-export). India accounts for a quarter of the world's rice exports, followed by Thailand, Vietnam, Pakistan, China, the United States, and Myanmar. U.S. corn exports constitute 27% of the global total, followed by Brazil, Argentina, and Ukraine, with smaller volumes from Russia and the EU. The largest barley exporters are the EU, Ukraine, Australia, Russia, Argentina, Canada, and Kazakhstan. The leading soybean exporters are Brazil, the United States, Argentina, Paraguay, and Canada; the first three are also the leading exporters of soybean oil and meal. As for other oilseed exports, Ukraine and Russia lead for sunflower, Indonesia and Malaysia for palm oil, and Canada for rapeseed.

Iran's choice of import sources depends on many factors, including commodity prices, shipping costs, oil prices, trade impediments (e.g., export controls), the availability of viable payment mechanisms (e.g., to skirt U.S. sanctions), political preferences, and geopolitical events. For instance, the pandemic has dislocated supply chains—India's colossal lockdown disrupted rice exports in April, while Vietnam and Myanmar banned and restricted them, respectively, which drove up prices. Likewise, COVID-19 has prompted Kazakhstan, Russia, and Ukraine to restrict their exports of corn, barley, and wheat.

Tensions with the United States have also affected Iran's grain supply. In July 2019, the mere risk of U.S. sanctions briefly led Brazil's state-run oil company to refuse local refueling rights to Iranian carriers trading urea for corn. In response, Tehran threatened to sever corn, soybean, and beef imports from Brazil. A few months later, at least

twenty vessels carrying over 1 million tons of grain had to idle outside Iranian ports over payment issues.

Technically, U.S. sanctions do not apply to food trade, but many foreign companies find the rules confusing, especially on financial transactions, and hence prefer to avoid dealing with Iran altogether. Last month, Reuters reported that sanctions-related payment difficulties had prompted Tehran to privilege smaller trading houses and direct private contracts over state purchasing tenders, with banks in China, Russia, and South Korea increasingly financing these tricky transactions. Iran's Central Bank reportedly failed to allocate subsidized foreign currency for feed and vegetable oil imports in recent weeks, triggering shortages.

Separate bilateral tensions have arisen with agro-export powerhouses such as Canada and Ukraine, including over the January shutdown of a Ukrainian airliner carrying many dual Canadian-Iranian citizens. And in May, a cyberattack targeting port facilities at Bandar Abbas caused sea and land freight congestion that lasted for days, increasing the risk of delays in essential imports (the attack was attributed to Israel, likely in response to Iranian cyber operations against its water infrastructure).

Despite the tensions, the United States has continued selling Iran varying quantities of rice, corn, wheat, and soybean, albeit at much lower volumes than before the revolution. In 2008, drought forced Tehran to import nearly 7 million tons of wheat, and 1.8 million tons of it (worth \$536 million) came from the United States—the regime's first such purchase from its sworn enemy in decades. Iran bought U.S. wheat again in 2012, this time worth \$89.2 million according to data from the Observatory of Economic Complexity.

Meanwhile, China has become **Iran's top trade partner (<https://www.washingtoninstitute.org/policy-analysis/view/with-covid-19-irans-dependence-on-china-grows>)**. Ironically, despite being the world's largest producer of wheat, rice, and soybean oil/meal, and the second-largest producer of corn, Beijing has negligible export margins on most of these staples due to voracious global demand.

## CONCLUSION

**A**lthough agriculture contributes over a tenth of Iran's GDP and employs one-fifth of its workforce, it remains hostage to recurrent volatility, including locust infestations, earthquakes, droughts, and floods. Feverish dam construction for irrigation purposes has only worsened environmental problems such as desertification and salinization, even as Tehran's insistence on agricultural self-sufficiency over imports puts unsustainable pressure on groundwater reserves.

At the same time, U.S. sanctions have deterred or degraded the use of regular banking channels and letters of credit between Iran and its trade partners, forcing it to rely on barter and humanitarian trade payment mechanisms. Sanctions risks may also unintentionally hamper the country's access to agricultural enhancement inputs and technologies necessary for improving domestic crop yield. The coronavirus pandemic has only exacerbated these problems by exposing supply-side food disruption risks.

Absent self-sufficiency and geopolitical stability, even a government with robust reserves would do well to diversify its grain supply basket, or at least be able to do so on short notice. In Tehran, however, **guns are generally sexier than butter (<https://www.washingtoninstitute.org/policy-analysis/view/lifting-the-arms-restrictions-on-iran-what-will-and-wont-change>)** when it comes to making budgetary decisions and crafting foreign policy. This ethos leaves the country vulnerable to big supply shocks, food shortages, and spiraling prices that can produce effects no less momentous than wars.

*Keyjn Lim is a PhD researcher at the School of Political Science, Government, and International Affairs at Tel Aviv University, and a Middle East and North Africa consultant analyst for IHS Markit. ❖*

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