

**Required Report:** Required - Public Distribution

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**Report Name:** Tree Nuts Annual

**Country:** Ukraine

**Post:** Kyiv

**Report Category:** Tree Nuts

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**Report Highlights:**

Post forecasts Ukraine's walnut production at 101,300 metric tons (MT) for marketing year (MY) 2024/25, a 4 percent decrease against MY2023/24. Household production continues to slide as old, non-productive trees are being chopped down. Post forecasts production areas for industrial growers to remain flat, as there is currently little appetite for long-term investments due to Russia's full-scale invasion. Post forecasts MY2024/25 exports will decrease by 9 percent as large ending stocks, which were predominantly amassed during MY2021/22, have been slowly depreciating for two consecutive MYs. At the same time, rebounding imports of tree nuts in line with economic recovery and adjustment to the "new normal" are putting downward pressure on volumes of domestically consumed walnuts.

## **Abbreviations**

CY – Calendar Year

ha – Hectare

GOU – Government of Ukraine

MAPFU – Ministry of Agrarian Policy and Food of Ukraine

MY – Marketing Year

MT – Metric Ton

NDVI – Normalized Difference Vegetation Index

PSD – Production, Supply and Distribution

SSSU – State Statistics Service of Ukraine

## **Commodities:**

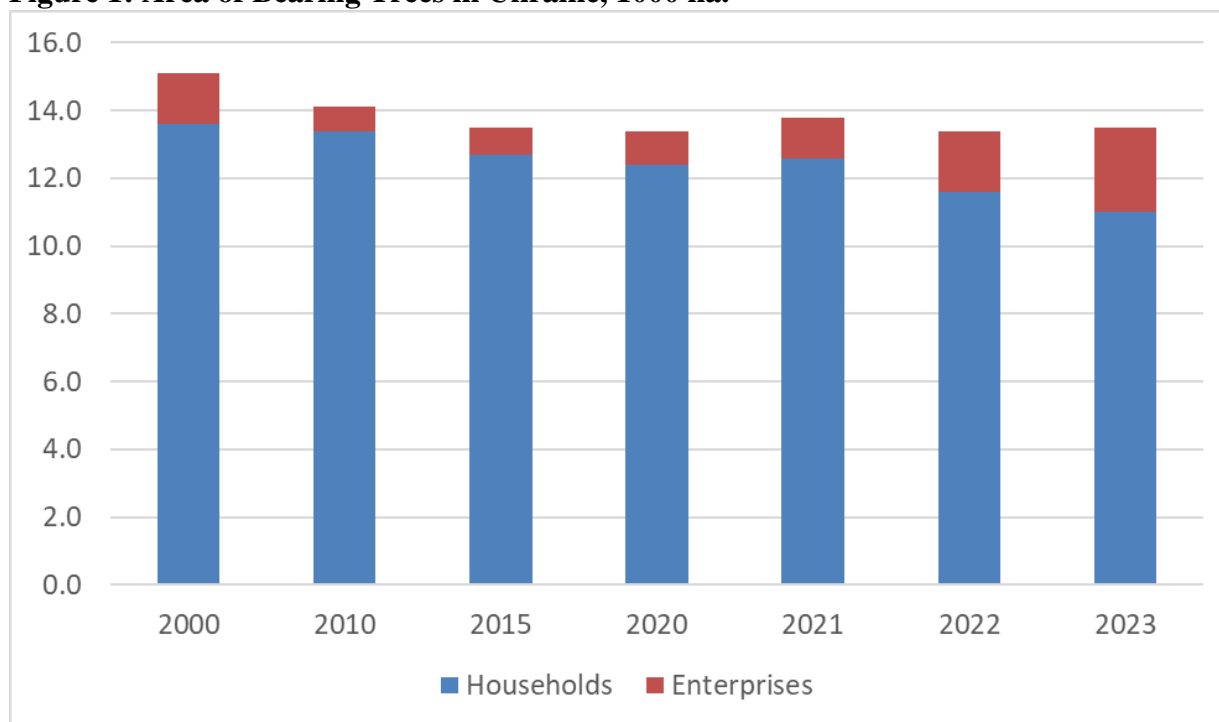
Walnuts, In shell Basis

## **Production**

SSSU published [official production numbers for CY2023](#). The total walnut reported area is 16,400 ha, a 4.1 percent decrease compared to the previous CY. Walnut production is reported at 106,120 MT, similar to the previous CY. Post accepts these as MY2023/24 estimates. Note that a MY for Ukraine starts in September and ends in August; therefore, MY2023/24 refers to the period between September 2023 and August 2024.

The main reason for sliding production area is a constant area decrease by households (Figure 1). The majority of walnuts harvested in Ukraine are produced by individuals or small private family farms harvesting trees on their land or in the vicinity of their farms. This category of producers is not typically concerned with the application of fertilizers and agrochemicals and uses manual labor to harvest and shell walnuts. Harvested walnuts are typically sold to intermediaries, who assemble batches for export or store them in-house in times of low demand or unfavorable prices.

**Figure 1: Area of Bearing Trees in Ukraine, 1000 ha.**



Source: SSSU

In CY2015, over 95 percent of Ukrainian walnut production area was on small, private family farms. In CY2023, these farms represented around 74 percent of total area. Post predicts this downward trend in walnut production on family farms will continue in the medium to long term as aging trees lose their productivity and are chopped down. However, family farms still enjoy a dominant position in production volumes, as they hold an absolute majority of the bearing tree area compared to industrial growers – 81 percent for CY2023.

The main reason for decreasing production area among households is Ukrainian farmers began developing walnut orchards for commercial purposes in 2009. The average size of these commercial orchards ranges from 20 to 50 ha. The establishment of commercial farms can be attributed to pre-2022 GOU financial support for orchard and berry producers and the establishment of the agricultural land market in Ukraine. Industry notes that farmers were investing in high-yield commercial orchards with multiple walnut varieties, installing irrigation systems, and applying fertilizers.

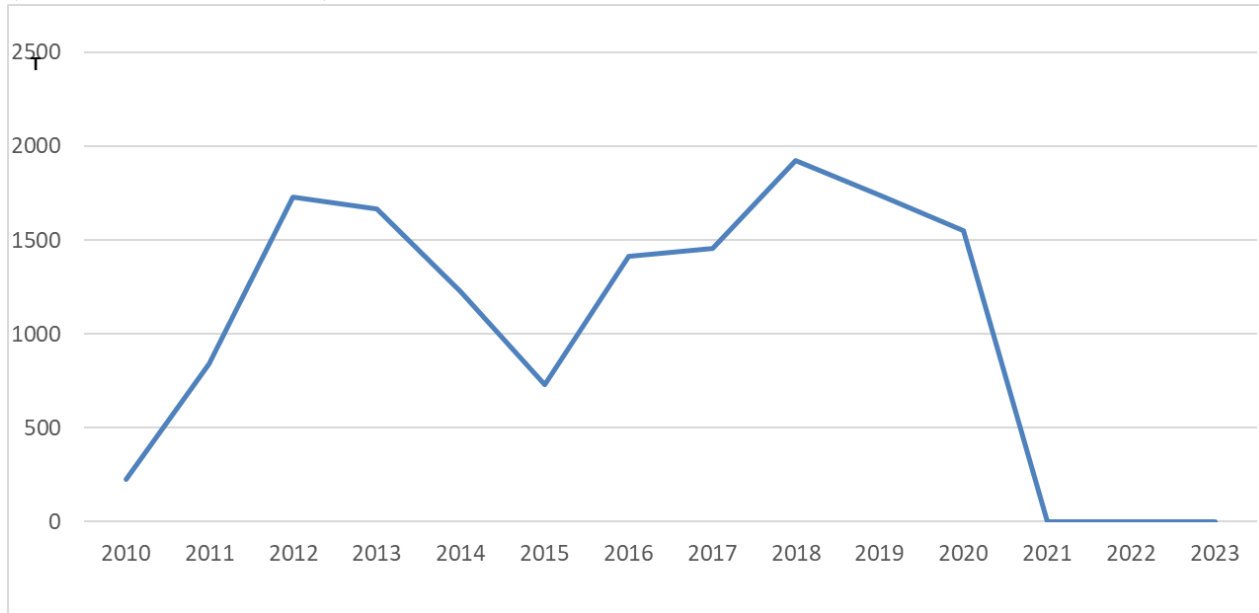
Some regions, especially in central and southern Ukraine, require irrigation to secure expected yields, while orchards in the northern part of Ukraine may experience lower yields because of the cooler climate. In southern Ukraine, seedlings can be planted in autumn, while in northern Ukraine, it is still advisable to plant in spring to avoid winter frost damage for newly planted trees. Walnuts are normally harvested from the end of September through the end of October.

According to SSSU data, commercial growers scaled down their total walnut areas to 4,300 ha for MY2023/24 from a peak area of 5,600 ha in MY2019/20. This might be an indication that some growers

went out of business due to uncertainties caused by Russia’s full-scale invasion of Ukraine and are subsequently cutting down or leaving behind the newly established orchards.

Professional growers are currently reluctant to make long-term investments due to the ongoing Russian aggression against Ukraine. Fruit tree import dynamics confirm this (Figure 2). The initial investment required to establish an orchard ranges from \$1,200 to \$1,800 per ha.

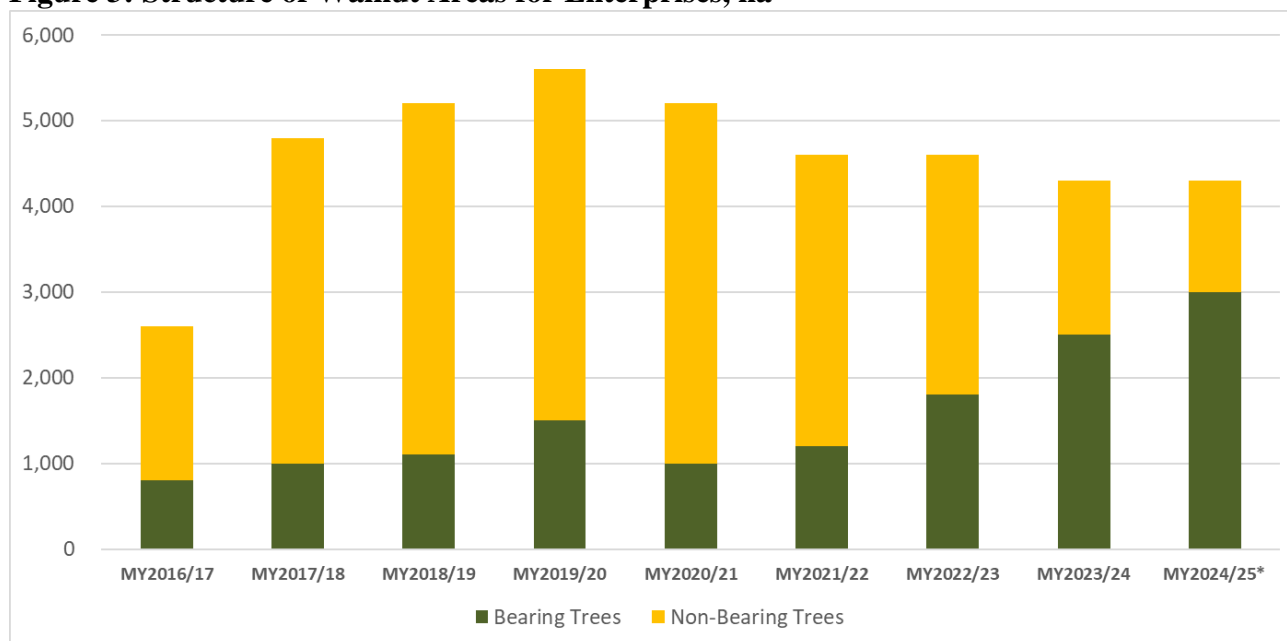
**Figure 2: Imports of Edible Fruit or Nut Trees, Shrubs and Bushes, to Ukraine (HS Code 0602 2090 00)**



Source: Trade Data Monitor, LLC

The balance of bearing versus non-bearing trees for enterprises/professional growers clearly demonstrates that they have discontinued investment into new production areas since MY2020/21, which the slump in tree imports also supports (Figure 3). Some enterprises that entered the sector late have most likely also left the business, which is supported by the drop in total production areas. At the same time, areas planted 5 to 8 years ago are coming into full-scale operation, leading to the gradual growth between MY2020/21 and MY2023/24. Given this trend, FAS/Kyiv estimates further growth in bearing tree area, in combination with stable total production area for MY2024/25, implying that non-bearing area will continue to shrink in the absence of new investments.

**Figure 3: Structure of Walnut Areas for Enterprises, ha**



Source: SSSU

\* FAS/Kyiv Estimate

Producers prefer Ukrainian origin seedlings. The Ukrainian State Registry of Plant Varieties (in [Ukrainian](#)) currently lists 42 different walnut varieties for CY2024, including 32 of Ukrainian origin, five Moldovan, and five French.

Most of Ukraine's household walnut producers do not treat trees for diseases, apply fertilizers, or tend to trees to ensure maximum output. However, with more commercial walnut production coming online and taking over poorly managed and aging orchards, these newly established commercial producers are reportedly paying greater attention to production technologies beyond irrigation to increase growing efficiencies. For example, these growers are conducting research into ideal growing areas, investing in nurseries to improve genetic stock, and applying fertilizers and pesticides to their orchards.

Manual sorting is predominant to ensure the quality and consistency of product batches. Walnut production in Ukraine is still mostly a labor-intensive business, with the majority of walnuts harvested by hand or rudimentary nut-picking devices on family farms used by the previous generation of growers. According to industry sources, family farms are known for the unstable quality of their product, which pushes them into the low-level segment for foreign buyers.

According to industry reports, commercial walnut production yields and quality have increased. Most commercial farmers did not consider installing shelling equipment when they were establishing their orchards, as they relied on suppliers of walnut seedlings who were promising unrealistically high prices for in-shell walnuts to benefit their own sales. This caused commercial growers to compete with family farms, which had lower production costs and therefore could sustain lower asking prices in the in-shell walnut market.

There has been a 3.1 times average price spread between shelled and in-shell walnuts since the beginning of MY2023/24 (September 2023-April 2024), with MY2022/23 at 3.7-times (Figure 7). These rates exceed the 2.34 conversion ratio from in-shell to shelled, creating an opportunity for professional growers to make additional profits on initial processing of walnuts. Most advanced walnut producers started purchasing equipment, allowing them to shell and pack their own product to avoid competition in the crowded, low-end in-shell market. Before Russia's full-scale invasion, farmers were actively applying for long-term banking loans to establish vertically integrated production clusters that included an orchard, processing facility with a packaging unit, and a certified quality control lab. This changed in February 2022. Now farmers are concentrating investments in commodity crops that provide short-term gains, as opposed to horticulture (see [GAIN Report UP2024-0016](#) for more details).

Commercial growers also sell walnut wood, which is used for local furniture manufacturing. Additionally, some wood is exported. In order to harvest wood, commercial walnut growers plant additional trees during orchard development, which they chop down for lumber after a few years.

Other products related to walnut value-added production are treated leaves for medicinal use and walnut (green/young nut) preserves. In recent years, Ukrainian consumers' demand for walnut oil has been increasing, with the European Union (EU) supplying the bulk of the market. There is also some domestic demand for walnut oil in the premium segment of natural cosmetic products.

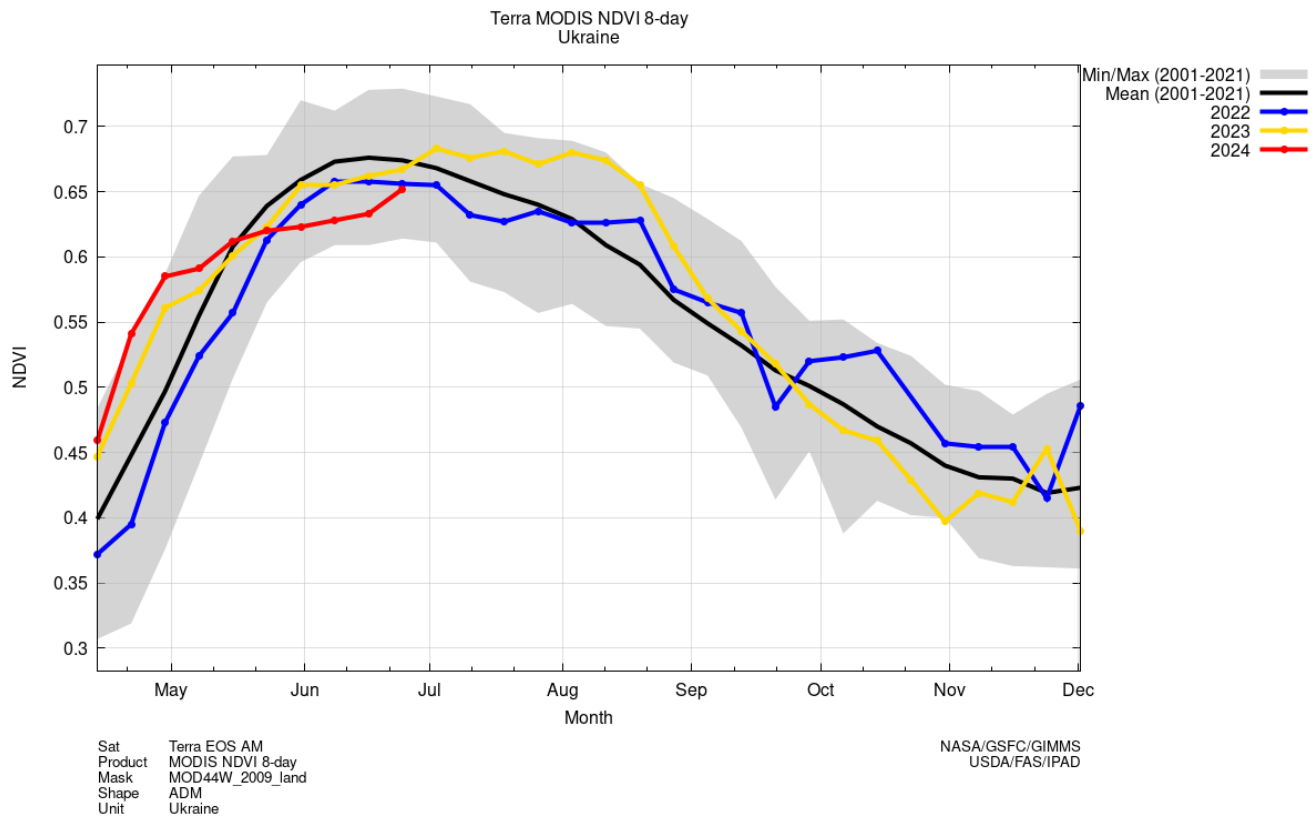
Post's MY2024/25 production forecast is based on the following production area assumptions:

- A slight decrease in production area in the household sector as old trees are retired and households are generally reluctant to plant new ones, dragging down overall production area.
- There will be no increase in production areas by enterprises. Establishing new orchards is a long-term investment that seems risky during Russia's full-scale invasion.

Post forecasts MY2024/25 production area at 15,800 hectares, a 3.7 percent decrease compared to Post's MY2023/24 estimate, on stagnating area for enterprises and continued decreases for households.

The normalized difference vegetation index (NDVI) is a standardized measure of healthy vegetation. High NDVI values indicate healthier vegetation, and low NDVI values indicate low or no vegetation. Based on the year-to-year comparison of NDVI for Ukraine, MY2024/25 growing conditions until the end of June 2024 were slightly below average (Figure 4).

**Figure 4: NDVI Dynamics for Ukraine**

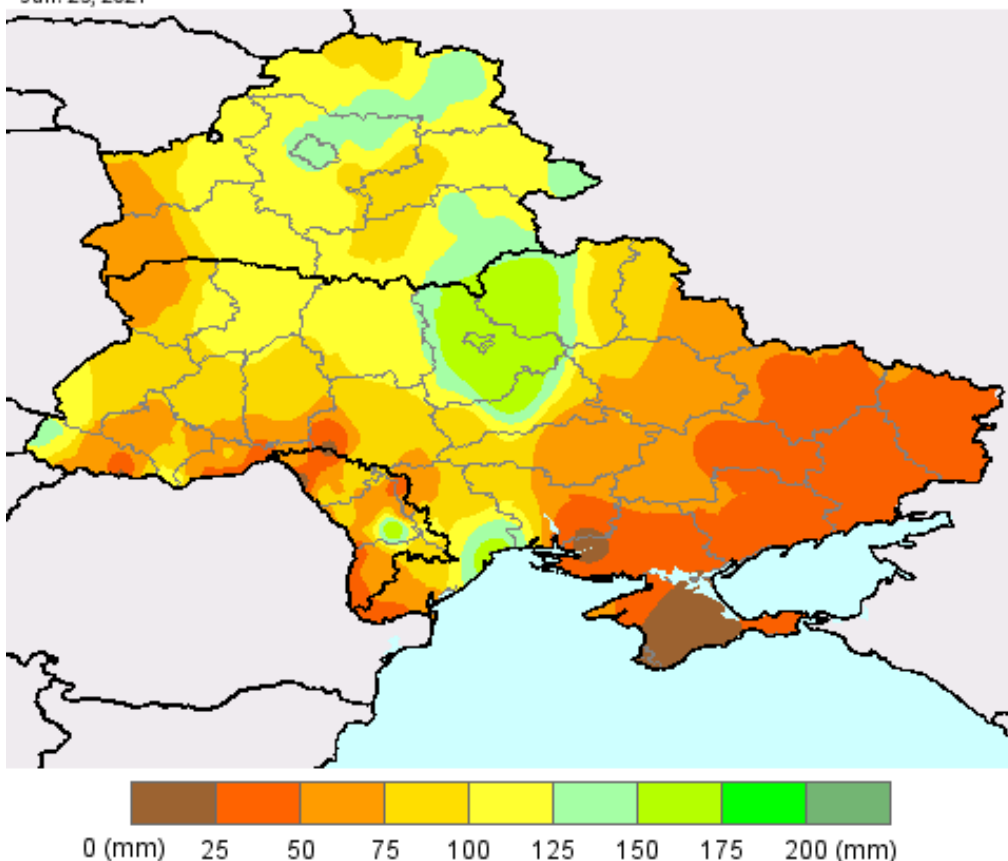


The available information about subsurface soil moisture does not hint to improvements in growing conditions in the short-term (Figure 5).

**Figure 5: Sub-Surface Soil Moisture in Ukraine**

**Subsurface Soil Moisture (WMO)**

Jun. 23, 2024



Source: World Meteorological Organization

Post forecasts MY2024/25 walnut production at 101,300 MT, a 4.5-percent decrease from the previous MY, on lower yields confirmed by the combination of low NDVI and deteriorating soil moisture and decreased production areas.

### **Consumption**

According to [UNHCR](#), around 6.5 million Ukrainians (around 15 percent of the pre-full-scale invasion population) have fled the country at the time of report writing.

Post uses the pre-full-scale invasion MY2020/21 as a benchmark for approximation of total walnut consumption (domestic walnuts and imported tree nut varieties), with subsequent MY numbers derived from the number of refugees who have left Ukraine. Post assumes domestic and imported tree nuts are interchangeable in terms of consumption patterns.

Ukraine started amassing abnormal ending stocks in MY2021/22, with at least some of these stored in suboptimal conditions by households or by small intermediaries that did not have dedicated storage.



Post, therefore, assumes some ending stocks will be lost. This number is also added to the domestic consumption number to properly incorporate factors influencing the end balance.

Based on the abovementioned assumptions, Post estimates domestic walnut consumption at 32,700 MT for MY2022/23, 29,400 MT for MY2023/24, and 23,500 for MY2024/25.

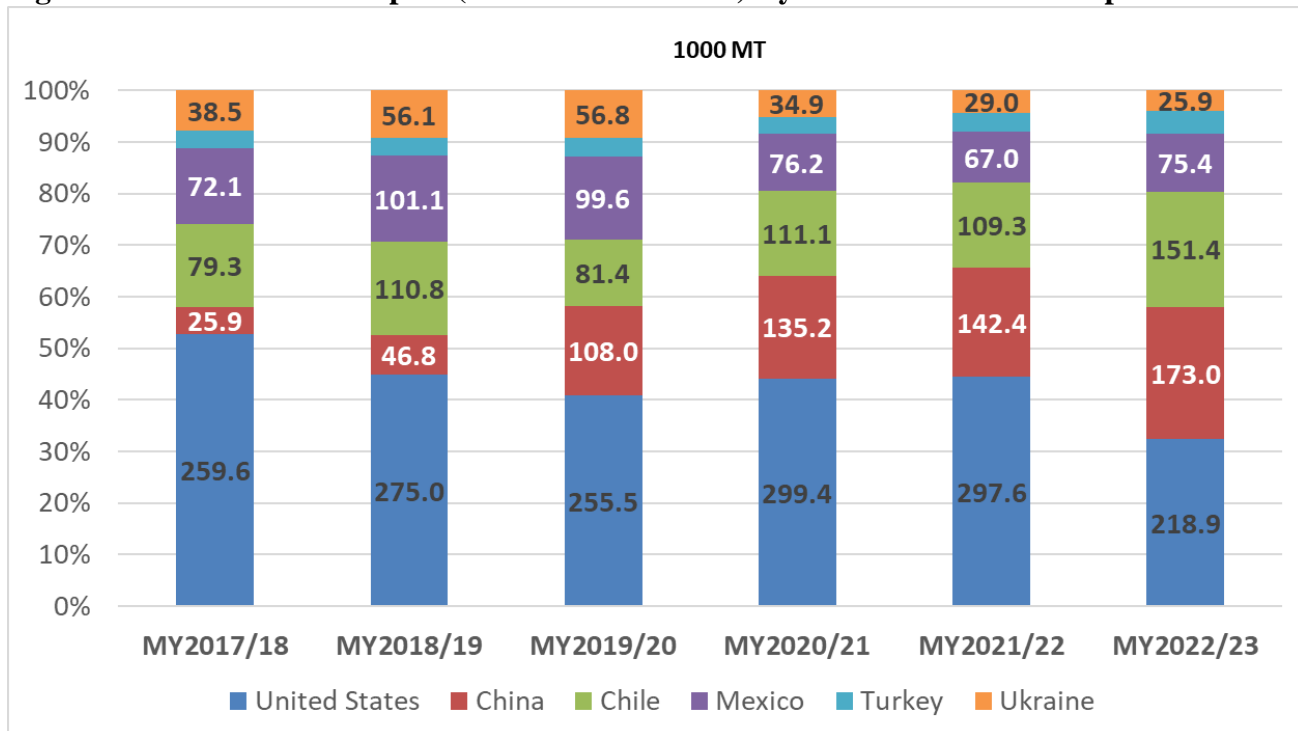
Walnuts are often sold in bulk, both shelled and in-shell, in farmers markets. Local food stores prefer to carry pre-packaged walnuts; however, the price of walnuts is only slightly lower than that of almonds or cashews, which Ukrainian consumers often consider premium-quality nuts. Despite the price similarity for packaged walnuts, consumers continue to view walnuts as lower-priced nuts. Many Ukrainians have walnut trees in their backyards that provide sufficient annual supplies for a family. Thus, local consumers are not keen on purchasing packaged walnuts over other tree nuts. Ukrainian consumers do purchase almonds and other imported tree nuts, but the locally grown walnuts and hazelnuts are the “go to” nuts for day-to-day food choices.

The confectionery industry is another market segment for walnuts. Producers of chocolates, sweets, desserts, bakery products, and snacks are the most reliable users of walnuts in the local market. For high-end food products, processors often import walnuts from the EU.

## Trade

According to industry sources, the gradual decline in walnut exports from Ukraine is associated with the generally low quality of products. A large share of walnut exports is based on small batches originating from myriad domestic households, and Ukrainian exporters have not been able to form large exportable batches with consistent quality. Ukraine’s competitors, including the United States, China, and Chile, actively meet demand in the high-end segment. Walnut exports from China further exacerbated a loss of global market share for Ukrainian producers (Figure 6).

**Figure 6: Global Walnut Export (In-shell and Shelled) Dynamics for Selected Exporters**



Source: Trade Data Monitor, LLC

Post forecasts walnut exports at 85,000 MT for MY2024/25, a 9.4 percent decrease compared to Post’s previous MY estimate. Post’s MY2023/24 estimate of 93,800 MT is valid under the assumption that Ukrainian exporters will be able to maintain the same rate of exports as observed at the beginning of MY. Export prices remained relatively stable for MY2023/24, which is an indication that walnut exporters were able to adjust their logistics channels to avoid impacts from farmer and trucker border protests and blockades that were happening on a large scale in adjacent EU countries from November 2023 to April 2024 (Figure 7). Post posits the increase in-shell prices might be connected with decreasing available stocks.

**Figure 7: Walnut Export Prices, Ukraine, \$/MT**



Source: Trade Data Monitor, LLC

Most Ukrainian walnuts are exported shelled. Ukraine exported over 23,000 MT of walnuts from September 2023 through April 2024, a 39 percent increase compared to the same period in the previous year. Approximately 70 percent of this volume (around 16,000 MT) was supplied to the EU, a 74 percent increase over the previous year. Outside of the EU, the major markets were the traditional market of Azerbaijan (2,200 MT) and Bosnia and Herzegovina (approximately 1,400 MT).

In-shell exports of walnuts were over 8,600 MT from September 2023 through April 2024, a 63 percent increase against the same months of the previous year. The main markets were Iraq, with 3,000 MT, a 4-fold increase, Azerbaijan with 2,100 MT, a 32 percent increase, and Türkiye with 1,500 MT, a 35 percent decrease.

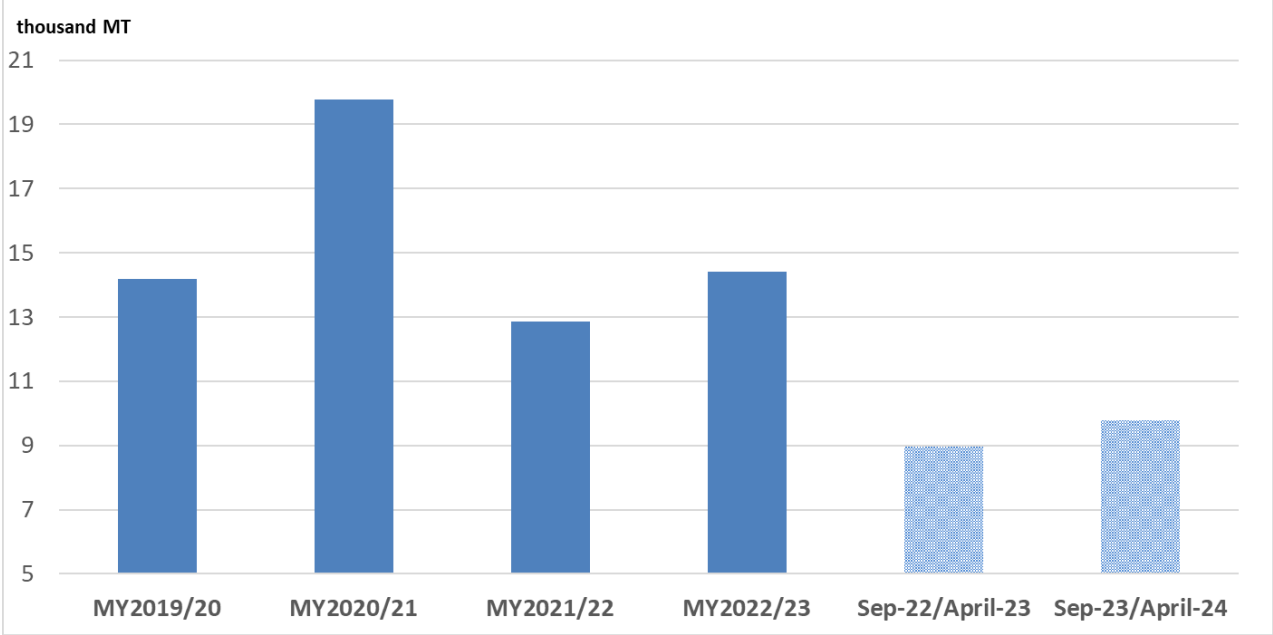
According to industry, the average conversion rate between shelled to in-shell walnuts in Ukraine ranges from 33 to 38 percent. Post expects this ratio will improve in the future with the development of commercial production. Conversion rates for recently established walnut orchards average around 55 percent. However, the share of these farms is still relatively small, so the impact on the national average is minimal.

Ukraine usually does not import any substantial volumes of walnuts due to strong domestic production that exceeds domestic consumption. Notable exceptions are imports of high-quality walnuts used in snacks and confectionery. This volume fluctuates around 40-60 MT shelled annually. MY2023/24 will likely stay within this pattern, based on the available trade data, as will MY2024/25.

Imported tree nuts have become a part of everyday diets alongside domestically produced walnuts. Consumption, and therefore import, of these tree nuts are mostly associated with middle-income consumers. At the beginning of Russia's full-scale invasion, imports nosedived, with total walnut imports falling to 12,800 MT in MY2021/22 (Figure 8). MY2022/23 saw a 12 percent increase against

the previous MY to 14,400 MT, while September 2023 through April 2024 demonstrated the same upward trend, with a 9 percent increase against the same period in the previous year. Post notes that growing volumes of imported walnuts are the most significant factor suppressing the consumption of domestically produced walnuts. The most popular imported tree nut varieties in Ukraine are almonds, hazelnuts, cashews, and pistachios.

**Figure 8: Imports of Walnuts\* to Ukraine**

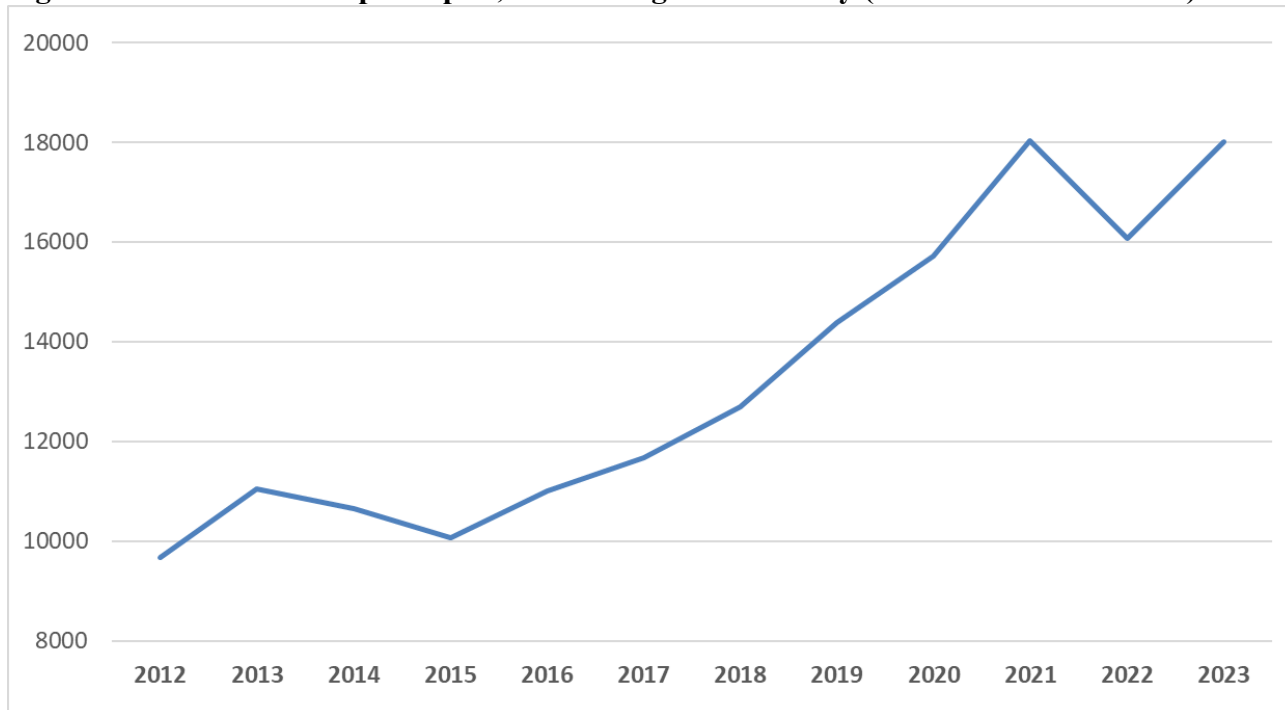


Source: Trade Data Monitor, LLC

\* HS Codes 2008, 0801, 0802

The rebound of Ukraine’s GDP per capita in CY2023 suggests that walnut imports might recover in CY2024, as imports are closely aligned with consumer spending (Figure 9). This would potentially result in lower consumption of domestically produced walnuts.

**Figure 9: Ukraine's GDP per capita, Purchasing Power Parity (current international \$)**



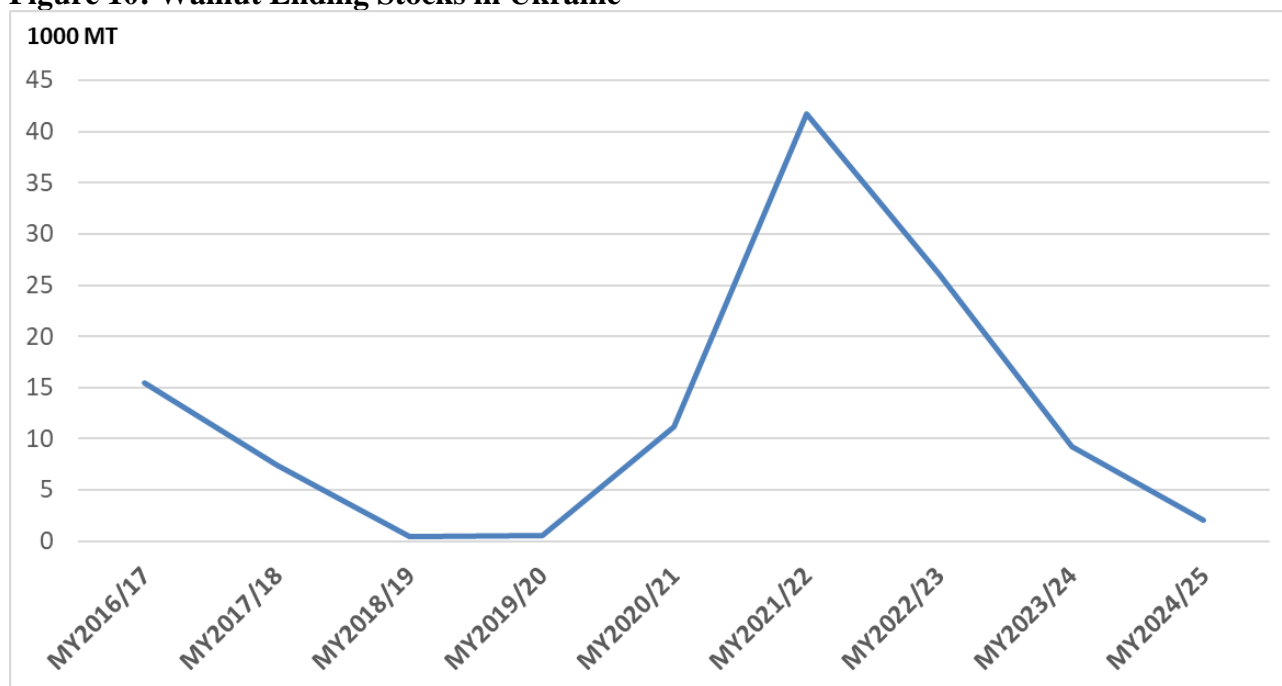
Source: World Bank Group

## Stocks

Walnut stocks are difficult to calculate because large quantities are still produced by private family farms that do not report stocks. Unless these products are exported, there is no statistical trace of stocks or production.

Ukrainian walnut producers and exporters had occasionally amassed stocks before CY2022, but this was mostly due to unfavorable prices or quality specifications on export markets forcing exporters to wait. In MY2020/21, stocks grew due to increased competition from other exporters (Figure 10). The full-scale Russian invasion in CY2022 (MY2021/22) resulted in a massive spike in stocks due to logistical issues on Ukraine's border with the EU. According to Post estimates, the following two consecutive MYs saw stocks gradually depreciate in part because of the rebound in exports and in part due to the loss of walnuts stored in improper conditions. According to Post estimates, at the end of MY2024/25, accumulated stocks might fall to relatively normal levels.

**Figure 10: Walnut Ending Stocks in Ukraine**



Source: FAS/Kyiv estimates

## Policy

Due to the full-scale Russian invasion, the GOU has cancelled all classic support programs for Ukrainian agriculture, including compensation payments to walnut growers (see [GAIN Report UP2022-0060](#) for more details).

On April 30, 2020, the Ukrainian Parliament adopted Land Law 2178-10 ([in Ukrainian](#)), paving the way for the buying and selling of agricultural land in Ukraine, with some limitations at the initial stage. The land market became functional beginning July 1, 2021, solely for private individuals. Maximum ownership is limited to 100 ha per person. Legal entities registered according to Ukrainian legislation are allowed to purchase land in 2024, with the ownership limit set at 10 thousand hectares. FAS/Kyiv expects the ability to legitimately secure land ownership could further incentivize Ukrainian farmers to develop orchards, including for walnuts.

In May 2024, Ukraine adopted two new laws setting minimum export prices for some agricultural commodities. In August 2024, the GOU adopted the resolution "On Approval of the Procedure for Approval of Minimum Permissible Export Prices for Certain Types of Goods" (see [GAIN Report UP2024-0019](#)), empowering MAPFU to establish specific administrative procedures for setting minimum export prices for tree nuts (HS Codes 0802 31 and 0802 32), among other exportable bulk commodities, including grains, oilseeds, vegetable oils and meals. Post expects these laws will have a minimal effect on the walnut industry in terms of exported volumes.

**Production, Supply, and Distribution Data Statistics:**

Walnuts, Inshell Basis Market Year Begins	2022/2023		2023/2024		2024/2025	
	Sep 2022		Sep 2023		Sep 2024	
Ukraine	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (HA)	0	17100	0	16400	0	15800
Area Harvested (HA)	0	17100	0	16400	0	15800
Bearing Trees (1000 TREES)	0	3260	0	3250	0	3230
Non-Bearing Trees (1000 TREES)	0	790	0	640	0	510
Total Trees (1000 TREES)	0	4050	0	3890	0	3740
Beginning Stocks (MT)	3100	3100	3125	26096	0	9216
Production (MT)	85000	107660	80000	106120	0	101300
Imports (MT)	25	157	100	200	0	90
Total Supply (MT)	88125	110917	83225	132416	0	110606
Exports (MT)	52000	52121	45000	93800	0	85000
Domestic Consumption (MT)	33000	32700	35000	29400	0	23500
Ending Stocks (MT)	3125	26096	3225	9216	0	2106
Total Distribution (MT)	88125	110917	83225	132416	0	110606
(HA), (1000 TREES), (MT)						
OFFICIAL DATA CAN BE ACCESSED AT: <a href="#">PSD Online Advanced Query</a>						

Note: export and import numbers in the PSD table are? in-shell, which is calculated by multiplying shelled walnut exports or imports (HS Code 080232) by 2.34 and adding in-shell walnut exports or imports (HS Code 080231)

**Attachments:**

No Attachments