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Report Name: Egyptian Aquaculture Industry - 2025 Update

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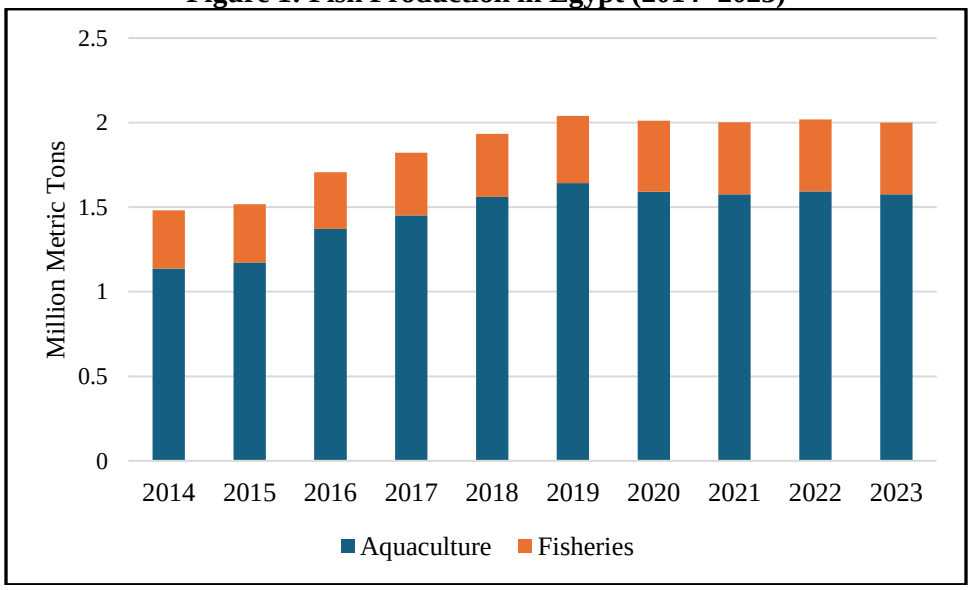
Report Highlights:

Egypt is the leading aquaculture producer in Africa, producing approximately two MMT of fish annually. Aquaculture accounts for roughly 80 percent of Egypt's fish production, primarily via private farms. However, Egyptian aquaculture faces challenges, including (but not limited to) competition for water, limited awareness of fish disease management practices, and a lack of adequate processing facilities. Despite these challenges, a future increase in production and demand is anticipated, due to continued population growth and economic recovery. Sustainable feed production practices, increased utilization of water efficiency innovations, as well as enhanced farming practices and biosecurity measures for improved fish health are all expected to help Egyptian fish farms continue to expand their productivity.

Production

According to the United Nations/Food and Agriculture Organization's (FAO) State of World Fisheries and Aquaculture 2024 Report,[1] Egypt leads Africa in aquaculture production, accounting for 67 percent of the continent's total aquaculture. While a leader in Africa, this still only represents 1.7 percent of global aquaculture production (which is led by China, India, Indonesia and Vietnam).[2]

Figure 1: Fish Production in Egypt (2014 -2023)



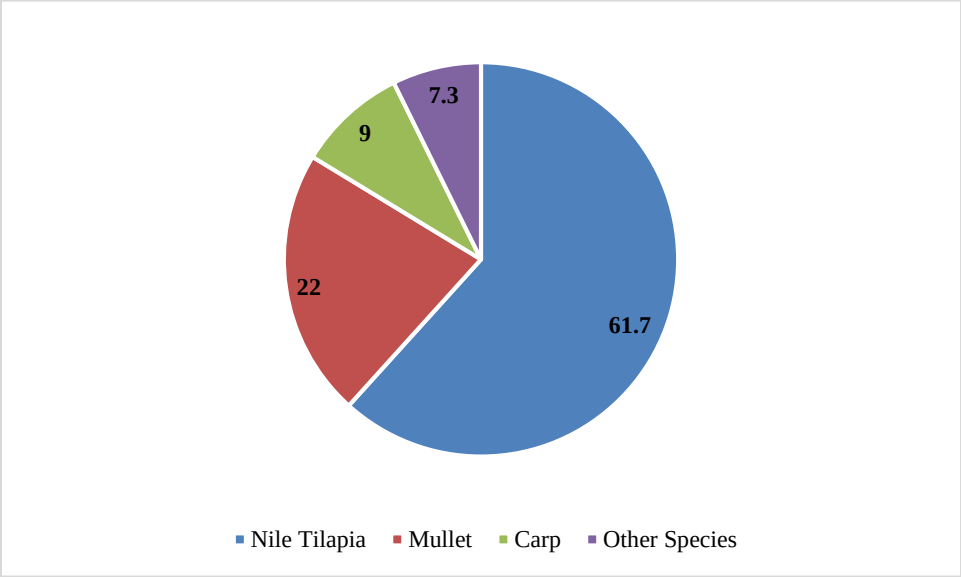
Source: Lakes & Fish Resources Protection & Development Agency

Since 2014, Egypt's total fish production (both farmed and caught) increased by 35 percent -- from 1.48 million metric tons (MMT) in calendar year (CY) 2014 to 2 MMT in CY 2023 (See Figure 1). Aquaculture's share of the total Egyptian fish output increased by nearly 50 percent, from 1.1 MMT in 2014 to 1.57 MMT in 2023. Notably, aquaculture represents roughly 80 percent of total Egyptian fish production at present, valued at nearly $3.5 billion.

There are a number of fish species commercially produced in Egypt, including Nile Tilapia (which dominates the industry and accounts for 61.7 percent of total farmed fish), mullet (22 percent), carp (9 percent) and other species such as sea bream, sea bass, meagre and catfish, eel and common sole account for 7.3 percent (See Figure 2).

[1] https://openknowledge.fao.org/server/api/core/bitstreams/66538eba-9c85-4504-8438-c1cf0a0a3903/content/cd0683en.html
[2] Latest data available

Figure 2: Percentage of Farmed Fish Species in Egypt in 2021[3]



Source: Lakes & Fish Resources Protection & Development Agency

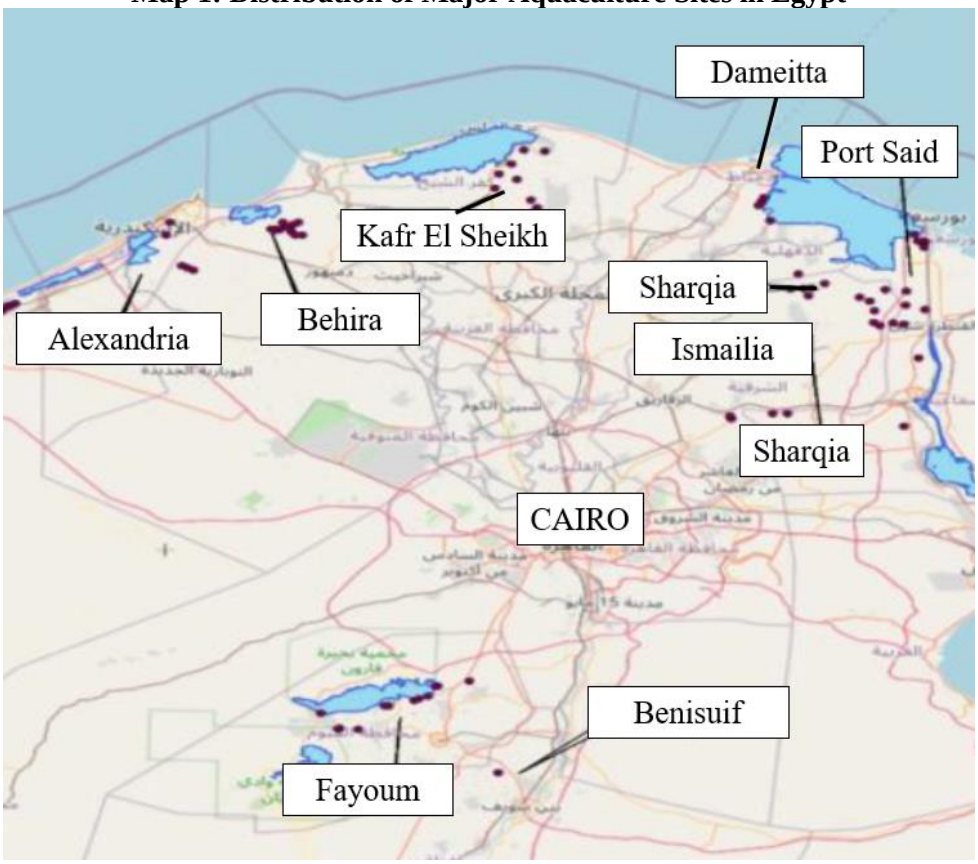
In Egypt, fish farms are concentrated in the northern Delta with the country's tilapia production concentrated in the four northern governorates of Kafr el Sheikh, Port Said, Sharkia, and Beheira. Of these, Kafr El Sheikh is the single most important governorate for fish farming in Egypt as it has 32,303 hectares of fish farms.[4] The governorate of Kafr El Sheikh alone produces 40 percent of total farmed fish production in Egypt.[5]

The Government of Egypt recognizes the potential of aquaculture and capability for development and expansion of the mariculture industry along the coastlines of the Mediterranean Sea because marine species (such as seabream and seabass) are grown in such habitat. Examples include the the Al Fayrouz farming project (east of Port Said Governorate) targeting the production of 13,000 MT of fish and shrimp annually, and the Ghalyoun Fish Farming Project (in Kafr El Sheikh Governorate) targeting a production of 13,800 MT fish and shrimp annually. Both focus on fish species such as sea bass, sea bream, and the mullet family. The projects are equipped with a feed factory with a production capacity of 150,000 MT per year, a veterinary unit, analysis and research laboratories, and a training center. Similarly on the Red Sea, the Suez Canal Authority established its fish farming project with an area of 303 hectares to produce sea bream, sea bass, lotus, sahili and crustaceans such as shrimp and lobster.[6] Expansion in aquaculture is somewhat limited because of water constraints, its fragmentated nature and small-scale production compared to other industries such as poultry. Due to its limitations, Egypt is focused more on increasing yields from existing farms, rather than investing in new projects.

[3] Latest data available
[4] Lakes & Fish Resources Protection & Development Agency
[5] https://almalnews.com/%d8%a8%d9%85%d9%86%d8%a7%d8%b3%d8%a8%d8%a9-%d8%a7%d8%ad%d8%aa%d9%81%d8%a7%d9%84%d8%a7%d8%aa%d9%87%d8%a7-%d8%a8%d8%a7%d9%84%d8%b9%d9%8a%d8%af-%d8%a7%d9%84%d9%82%d9%88%d9%85%d9%8a-%d9%83%d9%81/

[6] Lakes & Fish Resources Protection & Development Agency

Map 1: Distribution of Major Aquaculture Sites in Egypt



Source: Lakes & Fish Resources Protection & Development Agency

According to the FAO, Egypt's aquaculture production is anticipated to increase by almost 10 percent by 2032.[7] According to FAS/Cairo contacts, this increase in production is anticipated to spur demand for another 397,600 MT of fish feed, of which 119,280 MT will use soybean meal used in fish feed formulation (and the remaining from corn, corn gluten meal, or feed additives).

While the FAO is bullish on its forecast, there are also challenges for the Egyptian aquaculture sector to overcome, including high feed prices, water scarcity, fish diseases and pathogens, a difficulty of applying biosecurity measures, a lack of processing facilities, and a need for increasing packing and freezing capacity. Despite such challenges, Egypt continues to grow in the aquaculture sector, for many reasons:

1. **Education and Research:** The presence of strong aquaculture research institutions such as the Central Lab for Aquaculture Research (CLAR) and specialized faculties in the field of aquaculture.

2. **WorldFish and U.S. Soybean Export Council:** Since 1997, WorldFish[8] has operated in Egypt by supporting the development of aquaculture through innovations such as the genetic improvement of Nile Tilapia (the major freshwater fish produced in Egypt), improving feed efficiency, providing best management practice training, researching diseases which affect

[7] https://www.fao.org/newsroom/detail/fao-report-global-fisheries-and-aquaculture-production-reaches-a-new-record-high/en
[8] https://worldfishcenter.org/where-we-work/africa/egypt

Egyptian fish farms, and introducing climate-smart systems. Through this work, they are focusing on transforming Egypt into a model for other African countries. In 2019, WorldFish forged a partnership with the U.S. Soybean Export Council (USSEC) and established the Soy Excellence Center (SEC).[9] The SEC is a resource for those in the aquaculture sector (farmers, industry, researchers, etc.) to enhance their farm operations and management through a diverse range of in-person and virtual aquaculture training programs. Between 2019-2024, SEC conducted 78 training programs in fish farming with participation of 17,700 trainees. The programs address various aquaculture topics offered by experts in the field.

3. **Improving Management Practices:** By using innovative water circulation systems, extruded feed, and shifting to intensive farming, it has improved farm management practices. In turn, it has contributed to higher fish yields and provided opportunities for growth in commercial hatcheries and the fish feed industry.

4. **Private Sector Contribution:** Most importantly, contribution from the private sector has increased the development of the aquaculture industry in Egypt as around 80 percent of fish farms are privately owned (See Table 1 and Map 1). Private farms continuously seek new practices and technologies that could increase their yields in a sustainable manner.

Table 1: Private Vs Government Fish Farms in Egypt

Governorate	Private Farms (Hectares)	Government Farms (Hectares)
Kafr Ek Sheikh	27,103	5,200
Sharqia	18,060	0
Ismailia	3,534	672
Fayoum	1,302	0
Port Said	1,050	11,214
Dakhlia	960	0
Behira	540	0
Alexandria	15	0
Beni Seuif	36	0
New Vally	8	0
Total	**52,608**	**11,886**

Source: Lakes & Fish Resources Protection & Development Agency

[9] https://ussec.org/soy-excellence-center/

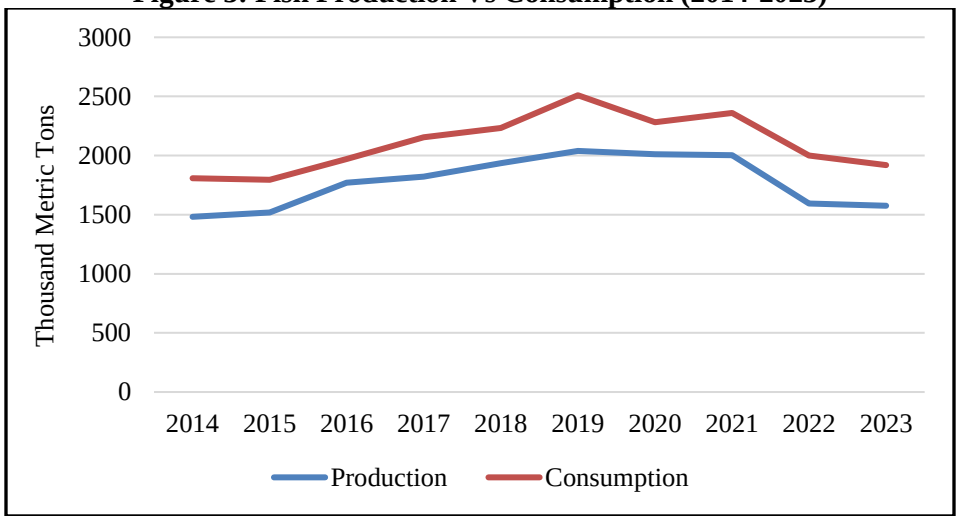
Consumption

Fresh fish in Egypt is a popular source of animal protein and is heavily consumed in coastal cities and the Northern Delta, in which popular recipes include rice on the side.

According to the Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt has a population of more than 107 million and is expected to reach 117 million by 2030. Egypt is also host to an estimated ten million migrants from Iraq, Syria, Libya, Yemen, and Sudan. Rising fish consumption is attributed to population growth, an increase in domestic supply, and an increase in the number of large supermarket chains that tend to have the most sophisticated cold chain capabilities, thus increasing the display of various farmed fish types appealing to consumers.

In 2022, consumption started to decline as Egypt suffered from shortages in foreign currency, which inadvertently produced high inflation rates. As a result, raw inputs and feed became harder to source, which inadvertently affected the production of fish (See Figure 3). Moreover, lingering impacts on the economy from Covid-19, the Russian invasion in Ukraine, and other significant geopolitical conflicts added to this economic condition.

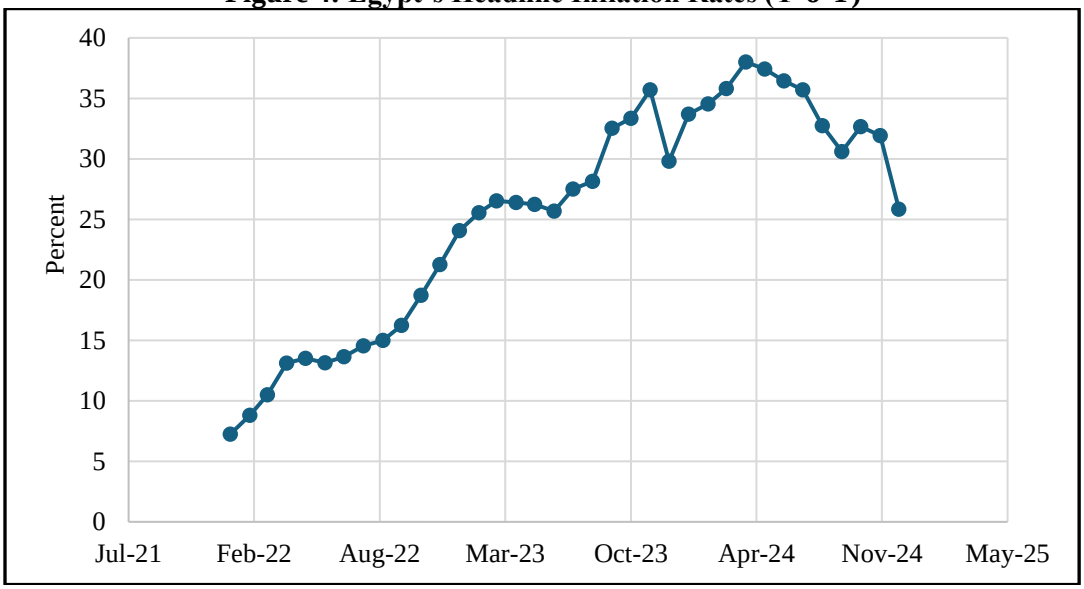
Figure 3: Fish Production Vs Consumption (2014-2023)



Source: FAS/Cairo Research

Between 2022-2024 Egypt's average monthly headline inflation rate was 25.35 percent, with the highest recorded inflation rate reaching 38 percent in April 2024 (See Figure 4). Higher inflation rates have caused an average price increase of 45.3 percent for fish and seafood between 2022 and 2024. As a result, inflated fish prices caused a decrease in per capita consumption by 13 percent in 2022 and 13.4 percent in 2023 (compared to 2021).

Figure 4: Egypt's Headline Inflation Rates (Y-o-Y)



Source: Central Bank of Egypt

However, FAS/Cairo anticipates a slight increase in fish demand throughout the next five years due to population growth, a gradual economic recovery and lower inflation rates. In the same way, the utilization of new feed, innovative technologies and water use efficiency innovations, and good farming practices should increase production, thus allowing for increased consumption.

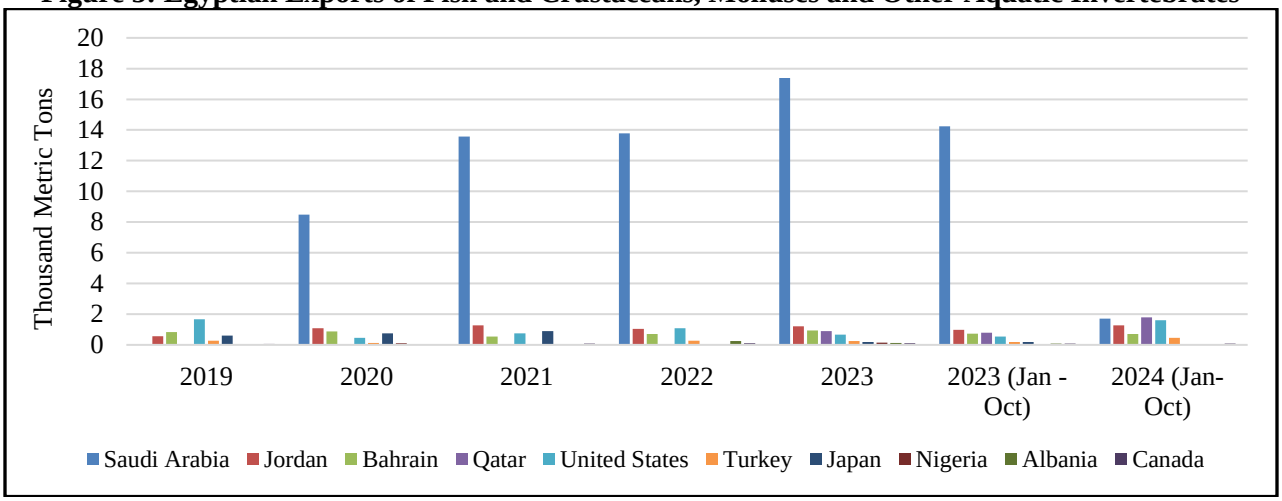
Trade

Egypt exports modest quantities of fish, crustaceans, molluscs, and other aquatic invertebrates which totaled 22,226 MT in 2023 (See Figure 5). Top five export markets include Saudi Arabia, Jordan, Bahrain, Qatar, and the United States. Fresh or chilled fish constitute most of the Egyptian exports to these destinations.

From May 28 to June 6, 2024, the European Commission conducted a review and audit visit to Egypt to evaluate the trading and control system for marine fish production. On December 7, 2024, the Chairman of the National Food Safety Authority in Egypt (NFSA) announced the reopening of fish exports to European Union countries after a three-year hiatus, (as NFSA fulfilled all the necessary requirements and conditions of the EU).[10] With this opening, Egyptian exports of marine fish are forecast to increase in the next few years to the EU.

[10] https://cloudflare.egyptindependent.com/egypt-to-resume-fish-exports-to-eu-after-3-year-hiatus/

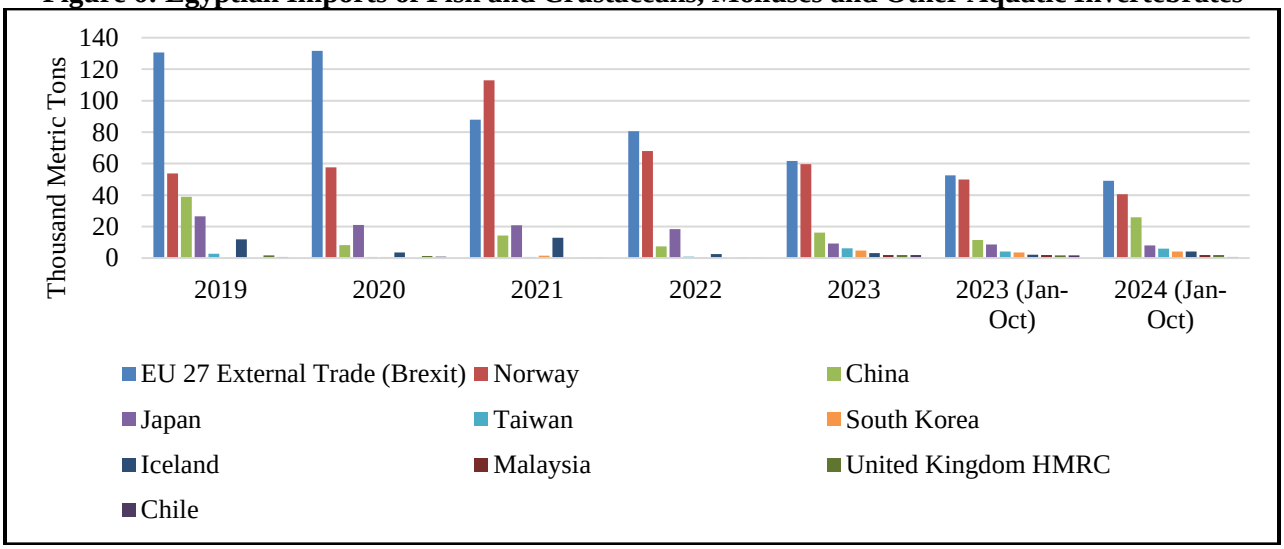
Figure 5: Egyptian Exports of Fish and Crustaceans, Molluscs and Other Aquatic Invertebrates



Source: Trade Data Monitor LLC- Top 10 Reporting Country Imports from Egypt

Of the imported seafood origins in CY 2023, EU-27 was the top supplier of fish and sea food products to Egypt at 61,666 MT, followed by Norway with 59,754 MT, and China with 16,261 MT (See Figure 6). The greatest quantity of imported fish and seafood from 2019 to 2023 were whole frozen mackerel, herring and other types of frozen fish which represented 66.8 percent of imports.

Figure 6: Egyptian Imports of Fish and Crustaceans, Molluscs and Other Aquatic Invertebrates



Source: Trade Data Monitor LLC-Top Ten Reporting Country Exports to Egypt

Fish Feed Industry in Egypt:

Currently, there are 119 privately-owned feed mills that provide aquaculture feed, producing both conventionally pelleted feeds and extruded feeds. The majority of aquaculture extruded feed is formulated with 20-30 percent crude protein.

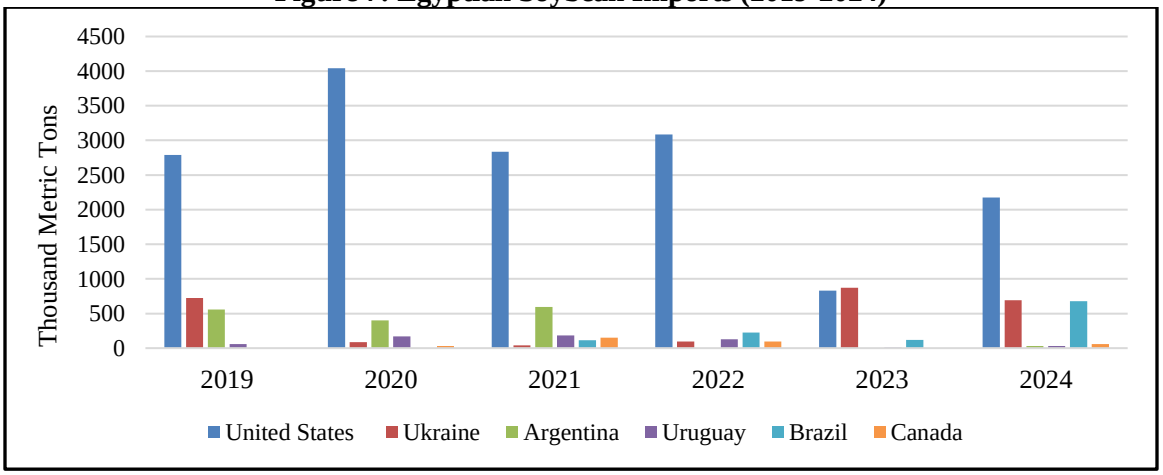
Extruded feed is produced by roughly 20 companies in Egypt. The growth of aquaculture in Egypt has been accompanied by growth in the aquafeed sector with substantial investments by international and local companies to increase feed production and enhance quality of feed. Since 2018, there has been an increase in the use of

extruded feed as farmers realized that extruded feed is more digestible and the extruded feed is able to float, which allows farmers to manage their feed demand and provide higher yields.

Since 2024, feed input costs have increased as competition for feed ingredients with the poultry and dairy sectors increased the costs of processed aquafeeds. As a result, many farmers could not afford the high costs and had to use cheaper feed, which led to a decrease in quality. However, the feed industry estimates that aquaculture feed market demand will exceed 2.0 MMT by 2032. To meet the increase in feed required, significant investments in aquaculture feed have taken place with more investments targeting marine species feed. Current fish feed demand ranges between 1.4-1.5 MMT annually.

Egyptian production of major feed ingredients such as soybeans and soymeal used for animal and aquaculture feed production do not meet local demand. As a result, USSEC and Egyptian industry partners established the SEC to build relationships with protein industry professionals in the Egyptian market by providing professional development programming and resources. The impact of the program in Egypt and in the region opened opportunities for shared experience, which led to a significant and steady supply of U.S. soybeans to Egypt. From 2019 to 2024, U.S. soybean exports to Egypt accounted for almost 72 percent of the total beans exported to Egypt. In 2020, Egypt was the third largest soybean export market for the United States. Out of 4.73 MMT in total soybean imports, U.S. soybeans stood at 4.04 MMT or 85 percent of total soybeans exported to the Egyptian market (See Figure 7).

Figure 7: Egyptian Soybean Imports (2019-2024)



Source: Trade Data Monitor LLC

Egyptian aquafeed producers have an extreme preference for U.S. soy, as they understand the sustainability, quality, and value of supply and are making a lot of room for continued growth. Industry sources report that meals produced from U.S.-origin soybeans show better uniformity, less fiber, and higher protein content than that of other origins, which increases digestibility of the feed providing farmers better feed conversion ratios.

Attachments:

No Attachments.