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Report Name: An Overview of the Aquaculture Industry in Egypt

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Report Highlights:

Egyptian aquaculture has witnessed a spectacular and rapid development over the past seven years. This increase is such that the country is now number one in Africa, number six worldwide in aquaculture production, and number three in tilapia production globally, becoming an important contributor to Egypt’s food security and economy. FAS Cairo anticipates increased fish demand in the coming years driven by population and economic growth which will require a sustainable increase in fish production through the utilization of modern feed use improvement technologies, high quality feed and water use efficiency innovations, as well as good fish farming practices.
Production:

Egypt’s total fish production increased by 17.64 percent from 1.7 million metric tons (MMT) in calendar year (CY) 2016 to 2 MMT in CY 2020 (See Figure 1). Aquaculture’s share grew from 1.37 MMT in 2016 to 1.62 MMT in 2020 which represented 81 percent of total fish production, an increase of 18.2 percent growth from 2016, followed by production from lakes with 10 percent, seawater with 4.4 percent, freshwater with 3.8 percent, and finally rice fields with 0.8 percent of the total production.

Total fish production in CY 2021 is estimated at 2.2 MMT with aquaculture share at 1.7 MMT of total production. Egypt has a promising plan to raise fish production to 3 MMT by 2025. Related to that production growth, there will be an increase in fish feed demand of around 650,000 MT, of which 260,000 MT will be soybean meal used in fish feed formulation.

The rise in aquaculture production is mainly attributed to significant expansion in the application of new technologies such as the use of extruded feed, water circulation systems, and improved farm management practices.

Egypt’s fisheries and aquaculture development plan to increase fish production to 3 MMT by 2025 could be summarized as follows:

1-The development of inland fisheries (mainly lakes of Al Manzala, Burullus, Mariout and Bardawil). Production in these fisheries amounted to 200,000 MT in 2020.

2-The expansion of fish farming through mega-national projects such as Birkat Ghalioun, Al-Diba Triangle, Al Fayrouz project in East Al Tafrea, and the Suez Canal Company fish farming project.

3-The development of hatcheries for the production of fry, with special emphasis on marine fry and the expansion of shrimp cultivation.

4- The expansion of integrated fish farming, especially with the increased expansion of reclaimed lands.

![Figure 1: Development of Fish Production in Egypt (2016-2020)](image-url)
5- Increase of fish production by converting the traditional system and semi-intensive farms to the intensive aquaculture system, and maximizing the return from the water unit using technologies such as In-Pond Raceway (IPR). This system relies on the creation of water circulation within the raceway units located in earthen ponds as well as on the removal of the organic wastes. The IPR as mentioned ultimately contributes to higher fish yields in a sustainable environmental manner that ensures higher fish growth rate, survival, and an efficient feed conversion ratio.

Consumption:

Consumption of fresh fish in Egypt is a traditional and key constituent of the Egyptian diet especially in coastal cities and the Northern delta, and a major source of animal protein for much of the population. Fish consumption exceeds local production by 325,000 MT annually, compensated by imports of species such as mackerel, tuna, herring, sardines, salmon, and frozen shrimp. Imports have steadily increased annually, reflecting the impact of rising income on demand for fish species that are not produced in Egypt.

Rising fish consumption is attributed to an increasing population (102 million, est. 2021) and economic growth. Per capita consumption of fish grew from 16.67 kg/year in 2012 to 20.26 kg/year in 2020 (excluding imports). FAS Cairo anticipates increased fish demand in the coming years driven by population and economic growth which will require a sustainable increase in fish production through utilization of new feed use improvement technologies and water use efficiency innovations, as well as good farming practices.

Fish Feed Demand:

The fish feed industry estimates that aquaculture feed demand reached 1.3 MMT in 2020 and is expected to grow to reach 1.9 MMT in 2025. The Egyptian aquaculture feed industry is made up of 105 privately-owned feed mills, providing 95 percent of fish feed. Feed production has shifted from conventionally pelleted feeds (10 percent) to high quality extruded feeds (90 percent). About eighty-five percent of marine fish feed is formulated locally to contain 25 percent crude protein. The most common fish feed formulations contain 35-40 percent soybean meal. Egyptian traders, crushers, and fish feed producers demand sustainability and quality of supply, both of which are key features of U.S.-origin soybean. 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. U.S.-origins soybeans also has higher oil content with superior quality.

Between marketing year (MY) 2016/17 and MY 2019/20, Egypt imported some 13.71 MMT of soybeans as a result of a tangible increase in domestic soybeans crush capacities during the past six years. Throughout that period, Egypt’s main suppliers have been the United States (9.97 MMT), Ukraine (1.59 MMT), Argentina (1.46 MMT), Uruguay (264,000 MT), and Brazil (248,000 MT). U.S.-origin soybean exports to Egypt have risen dramatically since the MY 2016/17 to MY 2019/20 period, accounting for 72.7 percent of the total beans being exported to Egypt (Figure 2).
MY 2019/20 was a record year for U.S.-origin soybean exports to Egypt. Out of 4.75 MMT in total soybean imports, some 3.83 MMT were U.S.-origin soybeans, or 80.6 percent of total soybeans exported to the Egyptian market. Other soybean export origins in MY 2019/20 include Argentina (402,000 MT), Ukraine (354,000 MT), and Uruguay (160,000 MT).

**Concluding Remarks:**

The development and expansion of modern aquaculture began in Egypt four decades ago. Since that time, Egyptian aquaculture has witnessed a spectacular and rapid development. This increase has been such that the country is now number one in Africa, number six worldwide in aquaculture production, and number three in tilapia production, becoming an important contributor to Egypt’s food security and economy.

Aquaculture’s growth will drive up demand for soybean meal significantly, by an estimated 46 percent by CY 2025. Fish feed producers have shown preference for soybean meal produced from crushing U.S soybean seeds to be included in their extruded feed production, resulting in high quality protein that is essential for fish production and fish farming.

Nonetheless, there are a number of rising challenges that could potentially affect Egyptian fish farming. Issues such as water scarcity, high input costs, fish disease and lack of processing facilities, packing and freezing capacities must be addressed to ensure that the industry continues its current trajectory.
Attachments:

No Attachments.