

## World Agriculture & Trade

# Egypt's Poultry Industry at a Turning Point

Egypt's highly protected poultry industry will face stiff international competition when the country lifts a ban on poultry imports on or before 2000—a commitment under the country's acceptance into the World Trade Organization (WTO). The ban has protected the poultry industry since a subsidy on imported corn was removed in 1988.

The subsidy removal caused an almost immediate jump in the price of imported yellow corn (the main component of poultry feed) from £E180 to £E500 per ton (\$53 to \$147 per ton) on the free market. Egypt imports most feedstuffs because land and water constraints limit domestic production.

A large shake-out followed the sharp rise in imported feed costs—50 percent of all broiler operation capacity shut down, the poultry feed milling industry collapsed, and the government initiated a privatization program to sell publicly held poultry operations. Retail prices for poultry meat rose, and per capita consumption dropped sharply.

In line with the country's continuing privatization and trade liberalization, the government freed up cotton and wheat planting requirements in 1994, and began a partial elimination of procurement policies which had forced farmers to sell output to the government at artificial prices. Farmers are now able to more closely follow market incentives to shift acreage to crops with relatively high returns, such as cotton and wheat, at the expense of corn and soybeans, making the poultry industry even more dependent upon feed imports.

The U.S. is likely to supply much of Egypt's feed grain needs, and should be in a good position to share in the poultry meat market when the ban is lifted.

### *Poultry Is a Major Protein Source*

According to the latest household expenditure survey for Egypt, over half of per capita income is spent on food. Poultry products account for nearly a third of expenditures on animal protein products, which represent 31 percent of the total food bill. The other 69 percent is for items such as cereals, fats and oils, vegetables, and fruits.

Consumption of animal protein in low-income families is restricted by their budgets, and protein is provided mostly by lower cost items such as eggs, cheese, grains, and pulses. Popular Egyptian dishes such as falafel, fowl modames, and khoshari are prepared from protein-rich legumes, including faba beans, chick peas, and lentils.

Per capita consumption of poultry meat has fluctuated widely during the last 20 years, increasing from 3.2 kilograms in 1975 to 9.2 kilograms in 1985. A sharp increase in the early 1980's was due mainly to the government's large feed subsidy program, which increased poultry production and reduced poultry prices to consumers. However, when the subsidy was phased out and poultry meat prices rose, per capita consumption dropped sharply in the late 1980's. It bottomed out at just 4.4 kilograms in 1991 and climbed to 5.8 kilograms in 1996, as incomes rose and demand strengthened.

Egyptians have a preference for live birds—slaughtered immediately at the market or at home—over frozen meats. In 1996, about 280,000 tons of poultry meat (carcass weight) was sold live and only 80,000 tons sold processed (chilled or frozen). Demand for processed poultry is limited to some extent by the lack of storage facilities needed to maintain products at proper temperatures.

The preference for live birds is apparent in market price differentials. In 1995 the average retail price was £E5.2 (\$1.53) per kilogram for live broilers, or £E8 (\$2.35) dressed weight, compared with £E7

(\$2.06) for frozen whole birds. Prices for competing poultry are similar. Live-weight prices for turkey, ducks, and geese were about £E1-£E1.5 higher than for frozen birds.

### *Commercial Firms Dominate Broiler Sector*

Approximately 70 percent of all broilers are produced by medium- to large-scale commercial enterprises. The rest is produced by small-scale, essentially non-commercial, village farms. More than one-third of Egypt's farmers keep a flock of about 20 birds. Farmers raise local chicken breeds which are well adapted to low nutritional standards, summer heat, and harsh environment.

The small-scale operators apply little technical know-how and add supplemental feed only as needed. As a result, yields are low (i.e., meat per bird) and feed conversion is poor. Chickens are kept mainly for egg production, and meat is produced as a secondary product. In addition, ducks, geese, and pigeons are kept for their meat, scavenging for food.

Forty years ago, village production was enough for the country's local consumption of poultry and eggs, and allowed for export of surplus eggs to neighboring countries. But village production has decreased over the years, and its contribution to Egypt's total production is declining to the point where most rural areas are now net importers of poultry.

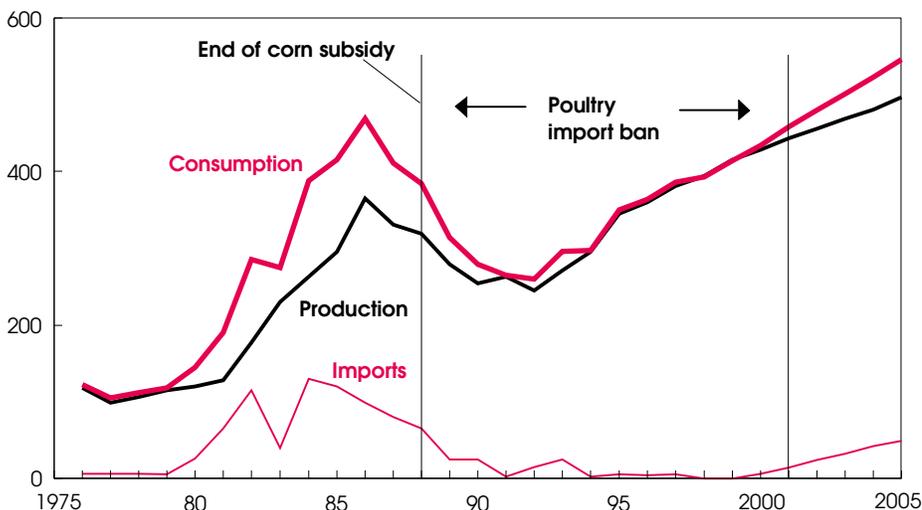
The medium- and large-scale commercial production comprises some 8,000 operations with an average of 5,000 birds each per cycle. The firms usually run 4-5 cycles per year, with 6-7 weeks per cycle. In addition to broiler operations, Egypt has 10 large duck operations, with annual production of 20,000 tons, and 50 turkey enterprises producing 20,000 tons.

Grower returns for poultry are reduced by high overhead costs due to expensive housing and low bird numbers per cage. The industry has a high average bird mortality rate due to diseases (between 3 and 10 percent compared with 2 percent in the U.S.).

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### Egypt's Poultry Imports Likely to Resume After 2000

1,000 metric tons



Carcass weight. 1997-2005 projections.

Economic Research Service, USDA

Finally, feed conversion rates are relatively high (about 2.6 pounds of feed per pound of gain compared with about 2 pounds in the U.S.), due to primitive feed storage facilities that allow feed deterioration and vitamin loss. Feed costs make up about two-thirds of the total production costs.

Because most commercial poultry farmers are not equipped with bulk receiving equipment, bulk storage, or automatic feeders, a substantial amount of manual labor is necessary. A study by Winrock International in 1992 on Egypt's poultry industry indicated that inefficiencies were responsible for about 30-40 percent of total production costs in Egypt. Some efficiency gains have likely occurred, however, since the 1992 study.

Some large-scale companies have highly mechanized feeding, watering, and heating facilities, and apply high-technology production inputs such as superior chicks, feed additives, vitamins, vaccines, protein concentrates, and premixes. They raise 10,000 birds in a cycle and have their own feed mills, slaughterhouses, and processing, cooling, packaging, and marketing facilities.

Egypt's total annual commercial poultry meat capacity is 450,000 tons, but actual production levels have never exceeded 70 percent of capacity over the last 10 years. Total capacity of slaughterhouses has remained at about 110 million birds per year. Plant capacity has never been fully utilized because consumers prefer live birds. Size has also been a problem as many poultry farms do not produce birds of uniform size—due in large part to low-quality feed and unbalanced feed rations—that would facilitate processing.

The lack of production and marketing integration is perhaps the biggest constraint on the industry's competitiveness. Vertical integration can incorporate several stages, including hatcheries through processing and distribution. Increased vertical integration tends to reduce cost margins along the processing and distribution chain.

### The Impacts of Policy Changes

By 1995, only 10 poultry feed mills (with an annual capacity of 1.4 million tons) had survived the removal of corn import subsidies, down from 50 mills (4.9 million tons) during the early 1990's. The collapse was due in part to declining demand for poultry meat as prices rose, but mostly to large commercial poultry producers cutting costs by preparing their own feed mixes.

Feed plants that survived the industry consolidation use modern technology, including fat-adding units, premixing systems for microingredients, and facilities to produce both mash and pellets. However, there is still much room for improving the quality of their feed.

Following the gradual liberalization of cropland allocations and the partial elimination of price controls and producer subsidies between 1986 and 1995, a new pattern of land and crop use is expected to emerge. Exposure to international prices after the elimination of government subsidies resulted in some crop acreage shifts that are based more on the relative profitability of each crop. The recent policy reforms in the crop sector favor the production of field crops with relatively high returns (e.g., cotton, rice, and wheat), making the poultry industry even more dependent on feed imports.

Very little additional land can be brought into cultivation because of water constraints. Short-term yield gains are expected to be minimal because yields are already high. Cropping intensity is already almost two crops per year. Consequently, Egypt is expected to continue to be an increasingly large importer of feedstuffs.

### *Opportunities for U.S. Exporters*

Egypt is a large importer of agricultural commodities (\$5.34 billion in 1996). It is the Middle East's fastest growing and largest market for U.S. agricultural exports, rising to \$1.53 billion in fiscal 1996 from \$613 million in fiscal 1994. Nearly one-third of total U.S. agricultural exports to the Middle East went to Egypt in fiscal 1996.

The substantial increase has been due partially to higher international prices of wheat and feed grains, but also to increased shipments of feed grains and oilseeds and products. Import demand has grown as the poultry industry has expanded in the 1990's. In volume terms, U.S. feed grain shipments increased from 1.43 million tons in 1994 to 2.6 million in 1995, but declined to 2.1 million in 1996 as prices rose sharply. Likewise, oilseeds and products shipments increased from 176,000 tons in 1994 to 310,000 tons in 1995 and dipped to 165,000 tons in 1996.

The U.S. dominates the Egyptian import market for wheat and yellow corn, with shares ranging between 70 and 100 percent, and 25 percent of soymeal in recent years.

During the 1980's, Egypt imported between 40,000 and 130,000 tons of poultry annually—whole birds and parts. The peak was reached in 1984 and accounted for 34 percent of the country's total consumption. During this period, U.S. poultry shipments dominated Egypt's import market. Most U.S. poultry exports to Egypt were subsidized sales under the Export Enhancement Program (EEP), which was instrumental in keeping U.S. poultry competitive with subsidized European Union sales. After the 1988 ban, shipments gradually declined to only 5,000 tons by 1996, mostly serving the institutional market (e.g., hotels and military).

The poultry sector is expected to reduce production costs and become more efficient as management improves in the pri-

vate sector (about 80 percent of the industry) and as the rest of the public sector is gradually privatized. Experts from international poultry companies are providing management expertise or working directly with joint venture investors to provide the know-how in integrating poultry operations from production through marketing.

USDA projects that by 2005, Egypt's poultry production will increase by 35 percent from its 1996 level of 360,000 tons, while consumption rises 46 percent as population and incomes rise. Egypt will likely need to import 50,000 tons, or 9 percent of total consumption in 2005. As a low-cost producer of poultry, the U.S. is in a good position to capture part of that growing import market. And with imports of corn and soybeans expected to continue to rise, the U.S. share of Egypt's agricultural imports will likely remain high.

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