

The Poultry Sector In Middle-Income Countries And Its Feed Requirements: The Case Of Egypt

Fawzi A. Taha

Introduction

Analysis of world meat production and consumption patterns identifies poultry as the fastest growing meat industry in middle-income countries. The major objective of this study is to project derived feed demand for Egypt's poultry sector to 2010, as a case study for middle-income countries that find themselves in a feed deficit position. Based on that information, the analysis will forecast total feed requirements to 2010, estimate the shares to be supplied from domestic production and from foreign markets, and assess Egypt's dependence on world feed markets.

Rising per capita income in middle-income countries has a significant impact on their patterns of food consumption, production, and foreign trade. According to the World Bank, middle-income countries constitute 94 of the world's 208 countries and are home to nearly 2.7 billion people, or 45 percent of the world's population. They include China, Russia, Brazil, Mexico, Argentina, Colombia, Iran, Turkey, Egypt, the Philippines, Republic of Korea, and Poland [47].¹ Their combination of large population and substantial purchasing power implies that these are significant countries for the study of evolving patterns of food demand and expenditures on food and other consumables. Current and potential demand for food in middle-income countries invites further research because of their importance in world markets. Middle-income countries also have a potential for rising expenditures year after year, because they are already in the "take-off" stage of growth. In contrast, low-income coun-

tries have, at best, a slow annual rate of economic growth. Many are stagnant, and some even show declining growth rates on a per capita basis. In high-income countries, demand for food is relatively stable.

The relationship between rising consumer demand for meat and rising feed requirements could create food-feed competition in some middle-income countries and growing dependence on foreign markets for both feed and livestock products. The magnitude of food-feed competition varies depending on available domestic natural endowments of arable land and water resources that could be used to meet expanded production of meat animals. Limited domestic opportunities for feed production could limit increases in domestic livestock products and encourage these countries to import more feed or livestock products, or both. On the other hand, abundant arable land and water resources, in conjunction with viable government production and trade policies, could encourage feedgrain and oilseed production, which in turn would enhance the initiation of a viable domestic poultry industry. In addition to natural resources and endowments, government trade policies shape the structure and efficiency of domestic industries and affect the mix between local production and imports of meat and feeds. With respect to these variables, middle-income countries could be grouped into four modalities with similar situations and common characteristics, each of which could be represented by a one-country case. Scaling down from best to least optimal situations, these cases are Brazil, Russia, China, and Egypt.

In the case of Brazil, the conversion of land to arable land in the interior states has led to increasing soybean and corn area and in cultivated pastures to support poultry and livestock production. Brazil is currently the world's second-leading producer and exporter of soybeans and soybean products, trailing the United States in soybean production and exports and following Argentina in the export of soybean meal and soyoil

¹ (Numbers in brackets refer to sources listed in the References section at the end of this report.) The World Bank defines high-income countries as those with per capita Gross National Product (GNP) above \$9,265 (based on 1999 estimates), middle-income countries as those with per capita GNP between \$760 and \$9,265 (for combined upper- and low-middle-income countries), and low-income countries as those with per capita GNP below \$760. The middle-income countries discussed in this report are classified according to the World Bank 1999 GDP estimates.

[33, 44]. Brazil is now able to meet rising demand for poultry from its own resources as well as export large quantities of poultry, pork, beef, and soybeans to world markets [44].

In Russia during the 1990s, removal of subsidies led to significant reductions in livestock inventory and meat production as the Russian economy underwent structural change. Livestock growers were unable to respond to rising domestic demand, as production remained costly and inefficient, and the country resorted to meat imports [3, 19]. In 2001, Russia was the world's second-leading importer of pork, and the third-largest importer of beef. In 2002, rising demand for poultry exceeded domestic production and imports amounted to 1.39 million tons, ranking Russia as the world's largest poultry importer. However, in March 2003, Russia imposed import quotas on poultry for 3 years; 704,000 metric tons in 2003, and 1.05 million metric tons each for 2004 and 2005 [49]. This new import policy is expected to slow down imports, push up domestic prices, and spur feed production and corn imports [44].

In China, rising poultry consumption depends on imports of both feeds and poultry meat. Taking advantage of low labor costs, China exports poultry products, primarily to Japan, including fresh, chilled products, and hand-deboned broiler meat for use in restaurants [41]. Currently, China is a net exporter of poultry meat. By 2005, however, imports are projected to exceed exports and the gap will rise substantially, due to area constraints and rising demand for imported feed. As a result, most production will be domestically consumed to meet growing demand for poultry and smaller amounts of poultry will be available for export [13, 38, 44].

Egypt typifies many countries in North Africa (Morocco, Algeria, Libya, and Tunisia) and the Middle East (Iran, Iraq, Saudi Arabia, Jordan, Syria, Israel, Lebanon, Yemen, Kuwait, and the United Arab Emirates). These countries are currently expanding their domestic livestock sectors to meet rising livestock product demand for consumption in the face of chronic shortages of feedstuffs. Consequently, Egypt presents a prototype case study of a middle-income country where shortages of arable land and water resources have spurred higher feed imports and greater dependence on foreign supplies of feeds and livestock products. The 10-year shift, which started in the early 1990s, of Egypt's poultry sector from the (mainly) public to the private domain was successful, providing a recent example for other countries. Income growth in the 1980s, accompanied by consumer subsidies and price controls, led to significant poultry imports. Subsidies for domestic production during the late 1980s, however, led to declining poultry imports and rising domestic production, along with rising feed imports.

Privatization of the poultry industry in the early 1990s, in turn, increased the sector's production efficiency and significantly boosted imports of feedgrains and soybean meal, but domestic producers were largely protected from competing poultry imports. High import tariffs (70 percent as of July 2003) and other barriers are still imposed on imported poultry.

Now, as Egypt—like many other middle-income countries—faces the potential challenge of greater liberalization under the WTO, the efficiency of its poultry industry will influence both domestic consumers, producers, and exporters competing to sell poultry products into this growing market.