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Middle East/North Africa Region: A Major Market for U.S. Feeds

The 20 countries of the Middle East and North Africa (MENA) region provide a substantial market for U.S. coarse grains, oilseeds, and meals. Prospects are for this market to continue growing. During the 1990s, the MENA region became increasingly dependent upon feed imports to support its expanding livestock and poultry production. In 2000, MENA was the largest foreign market for U.S. barley and soybean meal, accounting for 39 percent of U.S. feed barley exports and 21 percent of U.S. soybean meal exports. MENA was also the second-largest market, after Japan, for U.S. corn, receiving 22 percent of total U.S. corn exports. Feed imports are expected to expand further for most MENA countries because of population and income growth coupled with restrictions on imports of red meat and poultry.

Feed Imports Fill Gap Between Production & Demand

Both demand and supply factors have contributed to MENA's expanding feed imports, and will likely continue to do so, barring major political or economic crises. On the demand side, a rising regional population and an increasing average real GDP growth rate have sustained, and should continue to sustain, strong demand growth for animal products—the catalyst

behind feed demand growth. The region's population, 403 million in 2000, grew at about 2.3 percent per year during the 1990s and is expected to continue growing at around 1.8 percent during the next 10 years. Average annual GDP growth for the region during the 1990s was 4-5 percent, and this also is expected to continue. Although considerable disparity exists in per capita GDP among countries in the region, ranging from as high as \$19,000 in the United Arab Emirates to \$300 in

Yemen, the majority of countries are in the \$1,200-\$2,500 range, where increased incomes will go in part toward increased meat and poultry consumption.

Currently, many countries within MENA maintain restrictive policies on imports of poultry and red meat, including outright bans and/or high import duties, in order to bolster domestic production. Moreover, most Muslims in these countries have a strong preference for domestically produced livestock in order to ensure that the animals are halal (slaughtered according to Islamic rites) and thus suitable for consumption. Also, live or freshly slaughtered poultry is preferred over frozen by many consumers in the region. Strong regional demand for animal products bolstered MENA's output between 1990 and 2000: poultry production grew at an annual rate of 4 percent, red meat at 1.8 percent, eggs at 2.6 percent, and milk at 2.1 percent.

Traditionally, animal feeding in the region relied mostly on grazing and on crop residues such as wheat, rice, and barley straw, and corn, sorghum, and cotton stalks. Only small amounts of coarse grains and oilseed meals were used. With the ongoing modernization of animal feeding and the introduction of feed manufacturing, concentrates such as coarse grains and meals increasingly are replacing traditional feedstuffs. Feed requirements in the region have advanced in step with the livestock and poultry sectors. However, most MENA countries share the

Countries in the Middle East/North Africa (MENA) Region



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common circumstance of limited arable land and inadequate water resources, which together constrain the capability to produce feed grains and oilseeds.

Feed Imports: A Decade of Expansion

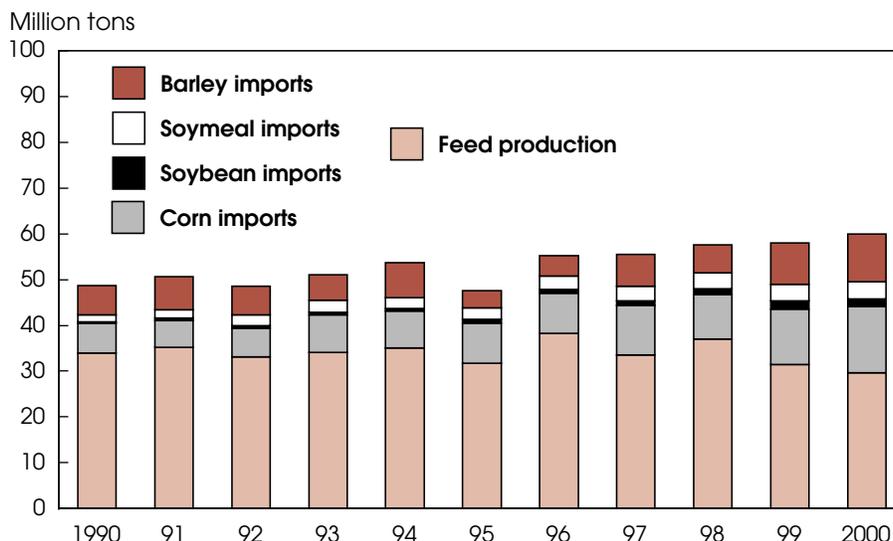
The latest available United Nations trade data indicate that during 1989-2000, MENA imports of total feedstuffs rose from 16 to 33 million tons, and from \$2.6 to \$3.9 billion in value. Seventy-six percent of the imports consisted of coarse grains, 13 percent oilseed meals, and 7 percent oilseeds; the rest included prepared feeds, fish and meat meal, cereal bran, and alfalfa.

Coarse grains. MENA's coarse grain imports from all sources in 2000 were mostly yellow corn (57 percent) and barley (41 percent). Yellow corn imports grew at a 11.8-percent annual rate from 5.6 million tons in 1989 to 14.4 million in 2000, overtaking barley imports in 1992. The upsurge in corn imports was due mostly to its use as a feed in the region's expanding poultry production. Barley is used in the region mostly for feeding sheep, goats, and camels.

MENA was the second-largest foreign market for U.S. corn exports in 2000 (after Japan). Between 1989 and 2000, U.S. yellow corn exports to MENA countries more than doubled, from 4.5 million tons to 10.3 million, accounting for 22 percent of total U.S. corn exports in 2000. Egypt was the largest MENA importer of yellow corn, alone accounting for 35 percent of U.S. exports to the region, followed by Algeria and Saudi Arabia (about 10 percent each), and Turkey (7 percent).

MENA's barley imports are inversely related to regional barley production, which is highly dependent on the amount of rain. From 1989 to 2000, the proportion of domestic barley production fluctuated between 59 and 83 percent of MENA's average annual consumption of 23.2 million tons, with the balance imported. U.S. barley exports to the region in 2000 totaled 413,000 tons, or 39 percent of total U.S. barley exports. Although down from 1.3 million tons in 1989, this volume was still large enough to rank MENA as the largest market for U.S. barley exports in 2000. Three-quarters of U.S. barley exports to the region

With Feed Use Climbing in the MENA Region, Imports Expanded to Supplement Languishing Production



Feed production includes corn, barley, oilseeds, and minor feed crops.
Based on United Nations data.

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went to Saudi Arabia, and the rest to Jordan, Morocco, and Tunisia.

MENA's imports of sorghum declined from 736,000 to 180,000 tons during the 1989-2000 period, as countries shifted to yellow corn imports due to a narrowing price differential. Imports of other coarse grains such as rye, oats, and millet were minor.

Oilseeds. About 78 percent of MENA's total oilseed imports in 2000 was soybeans, 16 percent was sunflower seeds, and the balance mainly cottonseed. Between 1989 and 2000, soybean imports alone accelerated at a 14.6-percent average annual rate, due mainly to rising demand for both oilseed meals and vegetable oils.

U.S. exports of soybeans to MENA countries increased from 370,000 tons in 1989 to 1.03 million in 2000. Half of U.S. soybean exports to the region were shipped to Israel, which has the largest crushing capacity in the region, another 27 percent went to Turkey, and 13 percent to Egypt. Most other countries in the region, with inadequate or inefficient crushing facilities, prefer to import soybean meal ready for feeding.

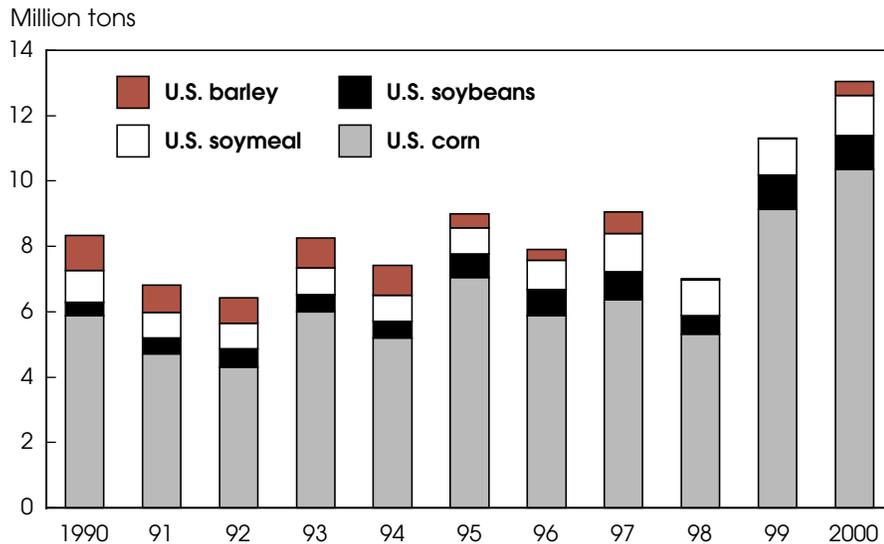
Imports of sunflowerseed jumped from 4,200 tons in 1989 to over 500,000 tons in

2000, with Russia, Argentina, and Romania as the major suppliers. Exports to the region represented 12 percent of U.S. total sunflower exports in 2000. Turkey was the largest single importer of sunflowerseed, receiving more than 88 percent of MENA's total, followed by Morocco (5 percent), and Israel (3 percent). Imports of other oilseeds were minor.

Oilseed meal. MENA's total oilseed meal imports more than doubled from 1.8 million tons in 1989 to 4 million in 2000. Soybean meal dominated the imports, followed by very small percentages of sunflower, cottonseed, rapeseed, and linseed meals. Lack of crushing facilities in most countries of the region encouraged the import of meals ready for livestock and poultry feeding without the need for any further domestic processing.

In 2000, MENA was the largest export market for U.S. soybean meal, receiving 1.2 million tons, or 21 percent of U.S. total soybean meal exports. The second- and third-ranked markets were the Philippines (15 percent) and Canada (14 percent). One-quarter of U.S. soybean meal shipments to MENA went to Saudi Arabia, followed by Egypt and Turkey, with 20 percent each.

U.S. Exports of Feed to the MENA Region Expanded During the 1990s



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MENA's Feed Production Shows Mixed Results

Coarse grain production ebbing. Despite increasing demand for coarse grain, the region's long-term trend upward in coarse grain production seems to have ebbed during 1989-2000. Production at the end of the period was actually about 24 million tons, down over 4 million tons from the beginning. However, the drop was due mostly to barley, which varies considerably from year to year due to the yield effect of rainfall on the mostly rain-fed production.

In contrast to barley, higher yields for corn pushed corn production in the region up marginally from 8.5 million tons in 1990 to 10.6 million in 2000. Sixty percent of corn output was produced on irrigated land in Egypt. Future expansion of corn area in MENA is expected to be marginal because of limited availability of irrigated land with secure water supplies. Other coarse grains such as sorghum, oats, and rye together accounted for less than 10 percent of the region's coarse grain production in 2000.

Oilseed production increased marginally. Oilseeds produced in the region include cottonseed, sunflower, soybeans, rape, and other minor oilseeds such as linseed, peanuts, and sesame. While the region's demand for oilseeds was strong through-

out the 1990s, production increased only 6.7 percent to 5.7 million tons. Cottonseed made up 75 percent of the region's oilseed production, half of which was produced in Turkey. Sunflower (18 percent) and soybeans (4 percent) followed. Soybeans are new to the region, and farmers consider current yields too low to compete with other crops for the use of land.

Oilseed meal crushing expands.

Although oilseed production in the region only increased marginally, crushing volume expanded substantially from 2 million tons in 1990 to 3.4 million in 2000. The expansion was due mainly to new soybean crushing facilities in Israel, Iran, Turkey, and Morocco, which relied mostly on soybean imports. The trend toward greater crushing continues throughout the region, with at least 11 new soybean processing plants in various stages of construction. These new crushing facilities will rely totally or heavily on soybean imports, adding further to the region's growing imports of soybeans.

With the expanding crushing capacity, MENA's soybean meal production rose rapidly from 474,000 tons in 1990 to 1.4 million tons in 2000. In 2000, soybean meal made up 42 percent of the region's total meal production, ahead of cottonseed meal at 31 percent. Sunflowerseed meal ranks third in production of oilseed meals in the region, and is crushed predominate-

ly in Turkey. In addition, the region produced small amounts of oilseed meals mostly from domestically cultivated crops such as rape, flax, sesame, peanuts, and corn.

Competition Intensifies for The MENA Feed Market

In 2000, the U.S. was the largest single supplier of corn and soybeans to the region, the second-largest supplier of soybean meal, and the sixth-largest supplier of barley. U.S. share of the region's corn imports was 66 percent, down from 80 percent in 1989. Argentina, the second-largest supplier, shipped 24 percent of the imported corn, up from zero in 1989. Other suppliers were Canada, Hungary, Romania, and occasionally China.

Until 1997, when Argentina and Brazil began making inroads, the U.S. supplied almost all of MENA's soybean imports. While the U.S. managed to remain the largest single soybean exporter to the region, with 60 percent of the market in 2000, Brazil had 27 percent of the market that year and Argentina 4 percent.

In MENA's soybean meal market since the early 1990s, major U.S. competitors have been Argentina and Brazil. In 2000, Argentina supplied 50 percent of the imports, followed by 32 percent from the U.S. and 11 percent from Brazil. U.S. import share was down from 63 percent in 1989. U.S. credit guarantees that had boosted U.S. soybean meal exports to the region now compete with lower prices from Argentina and Brazil.

MENA's dependency on feed imports is expected to increase in the future, and will result in further increases in corn, soybean, and soybean meal imports as domestic production of livestock and poultry expand to meet rising demand. In the longer run, improvements will occur in the region's domestic feed production (greater use of improved crop varieties and cultivation practices) and in livestock and poultry production efficiency, which may reduce the dependency marginally. Even so, the bottom line will be expanding feed imports. The U.S. will continue to be a major supplier, but will have to face price competition from other countries, notably Argentina and Brazil. **AO**

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