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Pakistan

Dairy and Products

Dairy

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Report Highlights:
The development of the livestock and dairy sector is a national priority due to increasing demands from urbanization and economic growth. Key areas for trade and investment include: live animals and genetics, dry milk and other dairy products, feed, pharmaceuticals, management, and machinery to upgrade milk production, processing, and marketing infrastructure. Pakistan imports 25,000 tons of powder milk annually at a cost of more than US$ 400 million. American companies can compete successfully in this large and growing market. Pakistan recently imported 2,600 dairy animals from Australia and is expected to import additional animals in the near future. U.S. companies can compete for this business, given the comparative advantages of U.S. dairy animals. To our knowledge, there are no sanitary/phytosanitary (SPS) or other barriers to the importation of U.S. live animals, genetics, or dairy products.

Includes PSD Changes: No
Includes Trade Matrix: No
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Islamabad [PK1]
[PK]

The livestock and dairy sectors play a major role in Pakistan's national economy and rural economic system, providing an important source of income, food, and export earnings. Agriculture is the largest sector of the economy and contributes 23 percent to gross domestic product (GDP). Livestock is the most important sub-sector of agriculture, accounting for 11 percent of GDP and 47 percent of agricultural income. Livestock production contributes significantly to exports, accounting for about 9 percent of Pakistan's total export earnings. This sector also is an important source of raw material for industry. Livestock serve as a social security system for the rural poor, providing both flow and store of capital. Livestock also provides security in the event of crop failure, particularly in arid areas.

The national herd consists of 24.2 million cattle, 26.3 million buffaloes, 24.9 million sheep, 56.7 million goats and 0.8 million camel. These animals produce 29.5 million liters of milk--making Pakistan the world's fifth largest producer of milk. The herd is not evenly distributed in Pakistan (Table 1). Buffaloes are the main dairy animals and are mainly raised in Punjab (61 percent) and Sindh (32 percent). Buffaloes are now making inroads in other provinces, including Azad Jammu and Kashmir and the Northern Areas. Cattle have traditionally been raised as draught animals and are distributed more evenly through Pakistan, except for Balochistan. Balochistan, however, has about 44 percent of Pakistan's sheep population.

Table-1: Distribution of livestock in different provinces of Pakistan

	Cattle	***Buffalo***	***Sheep***	***Goat***	***Camel***
Pakistan	24.2 million	26.3 million	24.9 million	56.7 million	0.8 Million
Province					
Punjab %	43.2	60.8	24.3	37.1	18.6
Sindh %	28.9	31.8	18.2	23.8	29.7
NWFP %	21.5	6.3	13.3	17.5	8.3
Balochistan %	6.4	1.1	44.2	21.6	43.4

Dairy Sector

Dairy is the largest and most important livestock enterprise. The total value of milk produced is greater than the value of Pakistan's two major crops (wheat and cotton). Livestock production, and especially dairy, is the major economic activity of small and landless farmers. More than 6.5 million families (consisting of an estimated 35 million people) are involved in raising dairy animals. Average herd size is 2-3 cattle/buffaloes per family and earnings represent as much as 40 percent of total household income. There are nearly 300 commercial dairy farms, with herds ranging from 50 to more than 3,000 animals (buffalo or cows). The Landhi cattle colony in Karachi is perhaps the largest of its kind in Asia.

Pakistan has high yielding buffaloes breeds such as Nili-Ravi and Kunndi with potential of over 5,000 liters of milk per lactation. However, the potential of these breeds is mostly untapped. Similarly, milk yields from Sahiwal and Red Sindhi cows can be significantly increased, thus enhancing the overall national milk production. In spite of this huge potential, Pakistan's milk yield is among the lowest in the world due to poor management practices, poor genetics, poor feed, and the lack of adequate veterinary and extension services.

Milk Marketing Systems

In spite of these constraints, Pakistan is the world's 5th largest milk producer, with production estimated at 29 billion liters annually. Modern commercial dairies process about 3-5 percent of total production, 20 percent is marketing through the traditional "gowala" system, and remainder is consumed on the farm or sold informally in the village. About 75 percent of the milk produced in Pakistan is consumed in the village, either for home consumption or through informal village sales. This system predominates due to marketing problems, including transportation, pricing, and the short life span of fresh milk. Under the traditional marketing system, "gowalas" (milkmen) purchase milk from farmers, transport it to urban areas, and either sells it to middlemen or directly to consumers. The consumer boils the milk prior to consumption. This system lacks hygienic controls and the milk is often adulterated.

Modern milk plants process only about 3 to 5 percent of Pakistan's total milk production. The major product is ultra-high temperature (UHT) milk standardized at 3.5 percent butterfat, and 8.9 percent solids not fat (SNF). There are around 25 UHT plants in the country. Recently Nestle inaugurated Asia's largest milk processing plant with a processing capacity of 2 million liters per day costing US $70 million. The establishment of this plant is a part of Nestlé's plan to invest $371 million up to year 2014 in Pakistan under a long-term investment plan. Another company Engro foods (brand name: Olper's) has established a large plant in Sindh and is planning to establish another in Punjab. The other companies are following suit and number of processing plants continue to rise. They have established their own collection systems and cool chains but cover only a small percentage of the country.

Inadequate collection, storage, and marketing infrastructure are the major constraints to the development of a modern dairy industry. Although Pakistan's aggregate milk production is more than adequate for its population, the lack of processing and distribution infrastructure, especially during the long hot summers (when milk has a shelf life of only four hours under moderate temperatures) prevents an adequate supply of milk from reaching urban consumers or other milk-deficient areas.

Market Potential for Dry Milk

Pakistan imports about $2 billion in agricultural products annually. Imports of milk and milk products represent about 25 percent of the total import bill, second only to edible oil imports. Imports consist largely of non-fat dry milk, baby formula, condensed and evaporated milk, and other similar formulations. Pakistan's high economic and population growth rates, changes in dietary patterns, and competition from cash crops put increasing pressure on Pakistan's existing milk production system.

Pakistan's annual dry milk consumption is about 37,000 tons, of which about 12,000 tons is produced locally and the remainder is imported to meet the demand of the urban consumers. Non-fat dry milk (NFDM) is imported mainly from India and several European countries. Full-fat dry milk (FFDM) is imported from Europe as well as Australia and New Zealand. Imports are expected to continue to increase to fill the growing demand from urban consumers.

Trade and Business Opportunities

Pakistan is the world's sixth most populous nation. The relatively sustained economic recovery over the past several years has increased demand for agricultural imports, including dairy imports. The middle class is expanding and one-third of Pakistan's population of 160

million falls within a middle-income group that has sufficient disposable income to buy quality U.S. dairy products.

Demand is increasing for milk and dairy products due to urbanization and economic growth. The current growth rate for milk consumption is 2.9 percent. Sources forecast milk demand will grow 3.2 annually during the next five years with only modest public sector investment. Rapid urbanization and growth of middle class also has resulted in increased demand of high value dairy products, including imported butter and cheese.

The cost of production for livestock products in Pakistan is relatively low, which provides room for increased efficiency. Pakistan is ranked among the countries with lowest cost of milk production in the world. The cost of labor is also low, compared to most developed and many developing countries. The government is implementing more liberal economic policies to encourage investment in the dairy sector. Key areas for trade and investment include: dairy products genetics, live animals, feed, pharmaceuticals, corporate dairy farming, marketing, and machinery to upgrade its milk production, processing, and marketing infrastructure.

Pakistan recently imported 2,600 dairy animals from Australia, mainly by the private sector with industry subsidized loans. Based on the success of this trade, Pakistan is expected to import additional animals in the near future. U.S. companies can compete for this business, given the comparative advantages of U.S. dairy animals. There also is a potential to expand U.S. exports of Holstein, Friesian, and Jersey semen and embryos.

Import Policy and Issues

Pakistan allows the importation of U.S. dairy related products. There are no quota restrictions and no prior permission is required. At present there are no sanitary and phyto sanitary issues (SPS) concerning the importation of U.S. dairy products. However the standard practice is that exporter first sends a fit for consumption certificate from the exporting country to the animal health commissioner for vetting. This vetted certificate by the ministry must be presented to the quarantine authorities at the time of arrival. There is 25 percent custom duty and 15 percent import tax on the dairy products.

Essentially, the federal government regulates imports and the provincial governments regulate food standards. Food standards are regulated by Pakistan Food Laws (PFL) and are administered by provincial health departments. At the time of import, the federal Customs Department will check the PFL standards to determine whether an imported item qualifies. In general, Pakistan's federal food import regulations are based on the premise that if a product is sold in the country of origin, Pakistani standards are met as well. The federal government generally applies Codex standards and guidelines in its regulation of imported food products. U.S. Food and Drug Administration standards also are used for certain products. For animal products, "Halal" certification (slaughtered in accordance with Islamic law) is required. For food products including dairy this certification is not a pre requisite but products with Halal written on labels have market edge.

The federal government's primary concern regarding imported dairy products is shelf life. Federal import regulations require that imported dairy products have at least 50 percent of original shelf life remaining at time of importation. To ensure shelf life requirements are met, correct labeling is of critical importance. Each retail pack must have the production and expiration dates printed on the label. U.S. exporters have had problems with requirements due to the use of bar-code labels, which do not have printed dates of manufacture and

expiration. As a result, U.S. suppliers using bar-coded labels alone will incur the extra cost of printing new labels or of affixing stickers with the printed production and expiration dates on each retail pack. In case the consignment is without the printed dates, a certificate from the manufacturer that 50 percent of shelf life remains will suffice for customs but for selling the products, dates of manufacture and expiry will have to be labeled.

Constraints in Livestock and Dairy Development

The development of the livestock and dairy is constrained by inadequate and poor quality of feed and fodder, limited animal health coverage, widespread breeding of genetically inferior livestock, outdated and limited marketing facilities, inadequate collection and storage infrastructure, the shortage of trained manpower, and a lack of an effective system of economic incentives and facilities to the producers. The export of livestock and its products is constrained because of the presence of diseases, poor sanitary/hygienic conditions, and inadequate livestock infrastructure and laboratory facilities to assure quality products.

Dairy Development Plan

In response to growing production, processing, and marketing problems, the government has formulated a dairy development plan to establish 11,200 dairy farms in 10 years that will provide 3.1 million new jobs. The Pakistan Dairy Development Company, which was established to implement this plan, has decided to launch a pilot project to establish more than 100 model farms with 3,750 animals producing 15,000 liters of milk per day during the next three years at an estimated cost of Rs. 15, 142 million ($1=Rs. 60.80) to be provided in the form of grants and loans. The long-term plan is expected to increase import demand for all inputs, including genetics, feeds, pharmaceuticals, and equipment.

Government Initiatives and Industry Trends

The government has taken a large number of initiatives to develop Pakistan's livestock sector. The important initiatives in this regard are:

-- Less than 15 per cent of all credit used in agriculture is used for livestock activities. The lack of credit for landless and small farmers is also a problem. Some banks have developed to instruments to reach these producers and the government has an agribusiness development and diversification project to build the capacity of five banks to lend to both the horticulture and livestock sectors.

--Two government-guaranteed private sector companies have been established to implement plans to develop the livestock sector: the Livestock and Dairy Development Board and Pakistan Dairy Development Company.

-- Important public sector initiatives to strengthen the livestock sector include: EU-PAK assistance (funded Rs. 1.92 billion), the Prime Minister's Livestock Initiative (Rs. 1.7 billion for working with rural support programmes), the Pakistan Dairy Development Company (Rs. 347 million for model dairy farms, milk marketing and research), the milk collection, processing and improvement program (Rs. 1.97 billion), and the meat development program (Rs. 1.8 billion).

-- Artificial insemination, which has largely been the domain of the public sector for the last 30 years, has resulted in only 10 per cent coverage of breedable animals. With the acute shortage of bulls for natural breeding, the scope of artificial insemination will need

to increase, particularly in the private sector.

--The availability of good quality seed for fodder crops, particularly high-yielding, multi-cut varieties is a major problem. In fact there are two lean seasons for fodder in the country. Fodder varieties, which ensure year round availability, are in high demand. These varieties may initially be imported.

-- Pakistan has well-developed poultry feed industry. The cattle feed industry, however, is only now emerging. Although there are now about 22 cattle feed production units in the country, these still cater for less than 5 per cent of the required concentrate needs.

-- The dairy industry is mainly dependent on production of UHT milk. While the market for UHT milk is expected to expand, there is no diversification of products and very few value added products.

-- With a very large livestock population demand for veterinary pharmaceuticals is increasing. Pakistan's total veterinary pharmaceutical market exceeds Rs. 500 million rupees annually, of which about Rs. 200 million is imported.

-- Local companies lack technical and business. The American companies can use the local potential by combining local potential with their technical and business skills.

-- Milk is traditionally collected by "gowalas" in the villages and brought to the collection centers of dairy plants. Establishment of milk collection centers in the milk-producing areas is a good investment, as the quality and quantity of milk procured will be improved.