

Engro Foods Ltd.

COMPANY BACKGROUND

Launched in 2005, Engro Foods Ltd. (EFL) manufactures, processes, and sells dairy products, juice, ice cream, and frozen desserts in Pakistan. It is the second largest producer of processed milk in the country. EFL has state-of-the-art processing plants and an ice cream factory in the province of Punjab, as well as its own dairy farm in the province of Sindh. The company employs more than 1,700 people, including 200 staff in rural areas.

EFL is a majority-owned (87%) subsidiary of Engro Corporation Limited (ECL), one of Pakistan's largest conglomerates with seven businesses in a wide range of industries. Other shareholders include individuals, employees, and institutional investors. EFL is listed on two stock exchanges in Pakistan.

Country: Pakistan

Sector: Agribusiness

IFC's Investment: 80 million in long-term debt financing

DRIVERS FOR EFL'S INCLUSIVE BUSINESS MODEL

- A majority of dairy farmers in Pakistan rear 2-5 cows; engaging and strengthening small farmers underpins EFL's ability to secure its milk supply
- Improving and maintaining milk quality requires training and deeper engagement with small farmers
- Need to expand domestic milk procurement rather than milk imports as EFL grows

Over 92% of milk is produced by small farmers in Pakistan. These farmers rear two to five cows that produce between 3-5 liters per day as against the world benchmark of 25-30 liters per day. Small farmers are dispersed over hundreds of thousands of kilometers in rural areas with poor or limited access to markets, transportation, and other infrastructure. This results in a high rate of milk spoilage or loss of 15%. Further, farmers rely on middlemen to sell milk and receive unfair prices and high interest rates for credit. Companies pay transaction fees to middlemen and receive milk of inconsistent quality. A primary business driver, therefore, for

EFL's inclusive business model is the need to engage small farmers directly for raw milk supply.

Second, EFL recognizes that procuring milk through middlemen will not help the company improve quality. Instead, it needs to invest in farmer training to procure quality milk to deliver high quality products. Third, growing demand for EFL's products requires the company to ramp-up its milk supply. To ensure stability and security of milk supply in the medium- to long-term EFL requires a strong system to expand domestic procurement.

EFL'S INCLUSIVE BUSINESS MODEL

EFL seeks to build strong, long-term relationships with small dairy farmers to ensure the company has a stable and secure supply of milk. However, the nature of the dairy sector in Pakistan presents formidable challenges.

First, EFL has to engage farmers in the informal sector. Less than 1 million of the approximately 8 million farming households sell milk to companies; the rest are in the informal sector. Second, EFL has to procure milk from farmers who are dispersed over a large geographic area. Dairy farming is small-scale in nature in Pakistan. Households on average rear two to five cows or buffaloes that yield three to five liters of milk per day. The more than 72 million dairy animals in the country are spread over hundreds of thousands of square kilometers at these very small farms. Third, EFL has to help farmers improve milk yields and quality, which are sub-optimal due to weak feeding patterns, lack of modern farming techniques, and poor access to veterinary services.

To overcome these challenges, EFL has developed a system that combines a vast village-level procurement infrastructure, transparency through technology, and technical training and agri-services for farmers. EFL's value-proposition to small farmers has three elements:

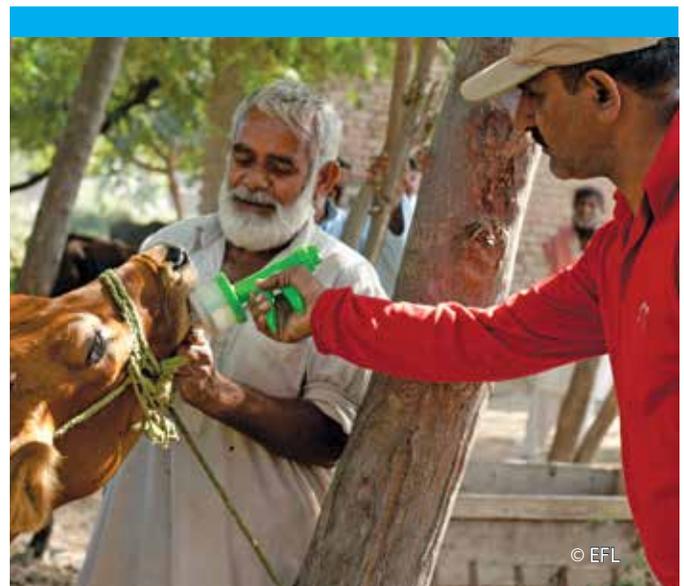
DIRECT SOURCING THROUGH VILLAGE-LEVEL INFRASTRUCTURE

EFL procures milk directly from farmers in rural areas through a three-pronged approach.

First, the company has set up over 1,800 **Milk Collection Centers (MCCs)** to reach 85% of EFL's supplier base of 300,000 farmers. Run by an EFL contractor, an MCC is typically a 300-sq.ft shop with a chilling tank, basic laboratory, and geyser. Equipment runs on electricity or a generator in off-grid areas. Centers are on average within two kilometers of farmers' homes so are walking distance or a short ride by local transport. Each center collects around 400 liters of milk per day.

Second, farmers who are far from an MCC can sell milk to **Village Milk Collectors (VMCs)** hired by EFL. The company has hired over 1,700 VMCs including **Female Village Milk Collectors (FVMCs)**. EFL trains them in milk testing, handling, and hygiene practices. The company provides VMCs with basic equipment such as collection utensils, a testing kit, and record keeping register; those who collect large quantities are given coolers and generators. VMCs collect milk regularly from dairy farmers in their villages at the company-set price and after conducting the required tests. They receive commissions based on volumes collected.

Third, EFL uses **contractors and dodhis** who purchase milk from farmers and transport it to an MCC where it is tested. Dodhis are village-level door-to-door milk collectors who purchase and sell milk to a number of buyers. Contractors may have their own milk collection networks of dodhis. In general, purchase prices are mutually agreed, farmers may



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receive cash advances, and tests are not conducted at the time of purchase.

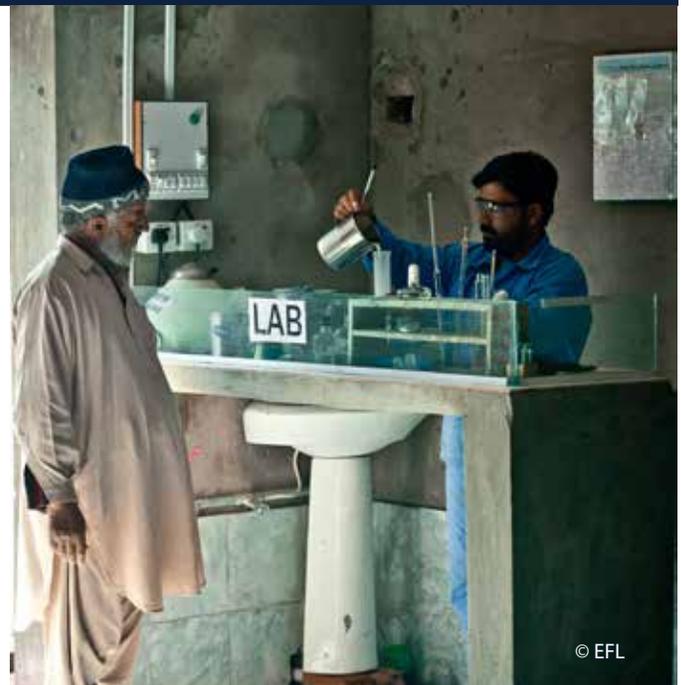
More than 360 trucks with insulated tanks then transport milk from MCCs to EFL regional hubs and thereafter to the milk processing plants.

TRANSPARENCY AND EFFICIENCY THROUGH TECHNOLOGY

EFL has created a management information system to collect, transmit, and monitor real time data from its MCCs called the Engro Milk Automation Network (EMAN). This name evokes the Urdu word iman, meaning faith, and signifies the trust-based, fair, and transparent relationship that EFL seeks to build with its suppliers.

Milk is tested and measured at an MCC at the time of delivery. After acceptance, a unique magnetic card assigned to the farmer is swiped at a point-of-sale terminal to enter the transaction in EMAN. Using a GPRS connection, data is transmitted to EFL staff so they can monitor gains and losses in the value chain, optimize logistics, and advise on improvements among other areas. EMAN is finally used to facilitate payment via direct deposit to suppliers or to MCCs that pay farmers in cash. Payment schedules can be customized based on farmers' needs.

Facilitate payment via direct deposit to suppliers or to Milk Collection Centers that pay farmers in cash. Payment schedules can be customized based on farmers' needs



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IMPROVED YIELDS THROUGH TRAINING AND ACCESS TO INPUTS

EFL has established 40 agri-service units staffed with 87 veterinarians and agrarians who the company trains to serve MCC clusters. Each unit serves an average of 25 farmers. Vets provide practical training and guidance in areas such as vaccination, hygiene, and feeding practices. EFL is about to launch shops for dairy and agri-inputs for farmers at its 22 field offices.

The company's projects with USAID and CARE Inc. USA are creating livelihood opportunities for women by training them in livestock and dairy management. These **Female Livestock Extension Workers (FLEW)** provide services to women dairy farmers including those in EFL's network. FVMCs are also trained through these programs.

In partnership with the Asian Development Bank and a local bank, EFL plans to extend 12-month working capital finance and longer-term finance for purchase of cows and other assets. Farmers' loan repayments will be deducted from weekly milk payments from EFL.

RESULTS OF EFL'S INCLUSIVE BUSINESS MODEL

- Total revenues of \$370 million and gross profits of \$8.5 million in 2013
- Procuring milk from 300,000 small dairy farmers
- More than 1,800 milk collection centers covering around 15,000 villages

EFL began operations in 2006 with a processing capacity of 234,000 liters of milk per day, which has increased to over 1.8 million liters per day as of 2013. The company's total revenues grew from \$16.5 million in 2006 to \$370 million in 2013. The company became profitable in 2010, and its gross profits increased from \$2 million in 2010 to \$8.5 million in 2013.

The company's supplier base of small dairy farmers more than doubled between 2008 and 2013 to reach 300,000. During the same period, the total value of milk procured grew from \$55 million to \$90 million. In 2013, EFL procured 200 million liters of milk or 95% of its total supply from small farmers, while the balance was sourced from the

company's dairy farm. A small dairy farmer supplies an annual average of 1,000 liters of milk to EFL, earning approximately \$450 in sales revenue. The company has also established a vast procurement infrastructure with a field force, 40 agri-service units, and over 1,800 milk collection centers across 200,000 square kilometers to cover around 15,000 villages.

In 2012, EFL received the G20 Challenge on Inclusive Business Innovation Award. In 2013, the Computerworld Honors Program, which recognizes visionary applications of information technology to promote positive social, economic and educational change, recognized EFL as a laureate for its EMAN system.

IFC'S ROLE AND VALUE-ADD

IFC's Investment: \$80 million in long-term debt financing

Investment Year: 2010

- EFL's total revenues grew from \$16.5 million in 2006 to \$370 million in 2013
- EFL's supplier base of small dairy farmers more than doubled between 2008 and 2013 to reach 300,000
- A small dairy farmer supplies an annual average of 1,000 liters of milk to EFL, earning approximately \$450 in sales revenue
- Over 1,800 milk collection centers across 200,000 sq. kms and 40 agri-service units that cover around 15,000 villages

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For more information, visit ifc.org/inclusivebusiness and engrofoods.com