SECTOR STUDY. AUGUST 2024

Together. Creating Value.

Dairy

Research Team

Saniya Tauseef | Senior Manager Research
Ayesha Wajih | Assistant Manager Research
Sundus Fatima | Senior Research Analyst

Dairy

Dairy

Introduction

- Dairy products encompass foods made from cow, buffalo or camel milk as the primary raw materials. These mainly include milk powder, whey powder, whey protein powder, colostrum powder, sterilized milk, modified milk, fermented milk, various types of cheese, processed cheese, cream, and anhydrous cream.

- Milk is a highly perishable commodity and needs to be processed (pasteurized) soon after it is collected to increase its durability. In terms of volume, liquid milk is the most widely consumed dairy product across the developing world.

- The range of milk products varies significantly between regions and among countries within the same region, influenced by dietary habits, available milk processing technologies, market demands, and social and cultural norms.

- Per capita consumption of milk and milk products is higher in developed countries. However, the disparity with many developing countries is narrowing. Increasing incomes, population growth, urbanization, and dietary changes are driving the growing demand for milk and milk products in developing countries.

- ~8% of global milk production is traded internationally. Major exporters of dairy products include New Zealand, European Union, USA and Australia. Meanwhile, imports are spread more widely across countries and the dominant importing regions for all dairy products are the Middle East and North Africa (MENA), South East Asia and China.

Source: FAO, USDA

Dairy

Global | Overview

- Global milk production faces potential constraints due to unforeseen weather events, which notably affect grazing-based production methods. Climate change heightens the risks of droughts, floods, and disease outbreaks, impacting the dairy sector in various ways such as price volatility, milk yield fluctuations, and adjustments in cattle population.

- Seasonal fluctuations in milk production, particularly in grass-based systems, lead to varying international prices, often peaking around the middle of the calendar year, especially for products like butter.

- Environmental regulations are poised to significantly influence the future trajectory of dairy production. Greenhouse gas emissions from dairy operations constitute a substantial portion of total emissions in certain countries, such as New Zealand and Ireland. Changes in environmental policies could consequently impact dairy production, particularly concerning sustainable practices like water management and manure handling. The removal of milk quotas in Apr'15 spurred specialization and restructuring within milk production across the European Union.

- Animal diseases represent a significant threat to milk production, with mastitis being the most prevalent infectious disease among dairy cattle globally, affecting operations of all scales. Beyond health impacts, mastitis exerts substantial economic losses through reduced milk yield and quality. Advancements in disease awareness, detection, and treatment hold potential to mitigate these losses and potentially boost milk production significantly in the future.

- The relatively high price of milk fat may prompt the substitution of milk fat with vegetable fats (such as fat-filled powders and other dairy products) for certain applications and markets. This introduces uncertainty regarding the long-term valuation of milk fat versus non-fat milk solids.

- Domestic policy changes also represent a source of uncertainty. In Canada, projections for skim milk powder (SMP) exports are uncertain due to shifts in the domestic dairy industry following the World Trade Organization's Nairobi Decision, which phases out agricultural export subsidies beyond CY20. In the European Union, the possibility of intervention buying of SMP and butter at fixed prices has had significant market effects in recent years.

Source: FAO, USDA

Dairy

Global | Production

- In CY23, global cow milk production increased to ~551.0mln MT, up 1.0% YoY (SPLY: ~-0.03% YoY). This growth was primarily driven by significant increases in Asia, where milk output rose to ~446.9mln MT YoY (or ~2.7% YoY), while contributing ~46.0% of the global milk output (SPLY: ~22.0%).
- Country-wise, India and China registered ~2.1% & ~7.1% YoY increase, respectively, in CY23. Cumulatively, these formed ~35.0% of regional and ~25.5% of global cow milk production during the year.

Production | Cow Milk ('000' MT)							
Sr.	**Countries**	**CY19**	**CY20**	**CY21**	**CY22**	**CY23**	**CY24***
1	**European Union**	143,060	145,436	144,833	144,378	144,800	145,300
2	**USA**	99,084	101,280	102,621	102,702	102,678	102,921
3	**India**	92,000	93,800	96,000	97,000	99,000	99,500
4	**China**	32,012	34,400	36,830	39,200	41,970	42,500
5	**Russia**	31,154	32,010	32,020	32,150	32,300	32,500
Others		130,428	132,724	169,730	161,787	130,249	129,302
Total		**527,738**	**539,650**	**545,204**	**545,067**	**550,997**	**552,023**

***Note**: Data shows production figures for selected countries, as per USDA classification of major producers. *Forecast*

Source: USDA

Dairy

Global | Production

- The total production of Whole Milk Powder (WMP) increased ~2.1% YoY in CY23, with CY24 forecast up ~0.8% YoY. However, New Zealand, contributing ~31.5% to WMP production during CY23, is projected to record ~1.7% YoY decline in CY24, indicating potential market adjustments and shifts in export strategy.
- With respect to Non-Fat Dry Milk production, the USA recorded ~1.9% YoY decline in CY23, with ~12.0% YoY lower CY24 forecast. However, India, with ~4.3% YoY growth in CY23, is expected to record ~2.7% YoY sustained growth in CY24.
- While traditional leaders like the USA and the EU are experiencing some level of stagnation or decline, countries like India and China are expanding their production capabilities. This could be due to increased domestic demand and a stronger focus on dairy as a dietary staple.

Production | Whole Milk Powder ('000' MT)							
Sr.	**Countries**	**CY19**	**CY20**	**CY21**	**CY22**	**CY23**	**CY24***
1	**New Zealand**	1,490	1,570	1,600	1,400	1,400	1,375
2	**China**	1,052	992	1,010	1,050	1,175	1,240
3	**European Union**	697	736	663	616	620	620
4	**Brazil**	596	590	594	568	566	590
5	**Argentina**	188	213	234	240	190	190
Others		523	505	518	463	481	455
Total		**4,546**	**4,606**	**4,619**	**4,337**	**4,432**	**4,470**

Production | Non-Fat Dry Milk ('000' MT)							
Sr.	**Countries**	**CY19**	**CY20**	**CY21**	**CY22**	**CY23**	**CY24***
1	**European Union**	1,556	1,590	1,504	1,517	1,500	1,450
2	**USA**	1,107	1,209	1,249	1,189	1,166	1,025
3	**India**	635	660	680	700	730	750
4	**New Zealand**	375	362	330	390	390	410
5	**Brazil**	158	161	164	157	162	160
Others		822	853	853	860	1009	898
Total		**4,653**	**4,835**	**4,780**	**4,813**	**4,957**	**4,693**

***Note**: Data shows production figures for selected countries, as per USDA classification of major producers. *Forecast*

Source: USDA

Dairy

Global | Trade

Sr.	Countries	CY19	CY20	CY21	CY22	CY23
	Global Exports | Milk & Cream (USD mln)					
1	**New Zealand**	6,256	6,413	7,837	7,726	6,803
2	**USA**	1,929	2,291	2,811	3,453	2,614
3	**Germany**	2,919	2,961	3,210	3,553	3,464
4	**Netherlands**	2,355	2,210	2,351	2,970	2,861
5	**France**	1,654	1,804	2,007	2,125	1,973
	Rest of the World	14,513	14,390	16,057	17,166	13,423
	Total	**29,626**	**30,069**	**34,273**	**36,993**	**31,138**

Sr.	Countries	CY19	CY20	CY21	CY22	CY23
	Global Imports | Milk & Cream (USD mln)					
1	**China**	4,280	4,639	6,476	6,104	4,542
2	**Germany**	1,660	1,862	2,154	2,817	2,611
3	**Belgium**	1,212	1,145	1,311	1,772	1,577
4	**Italy**	1,170	1,049	1,016	1,261	1,330
5	**UAE**	915	1,034	992	1,252	N/A
	Rest of the World	18,949	18,770	19,410	22,057	15,248
	Total	**28,186**	**28,499**	**31,359**	**35,263**	**25,308**

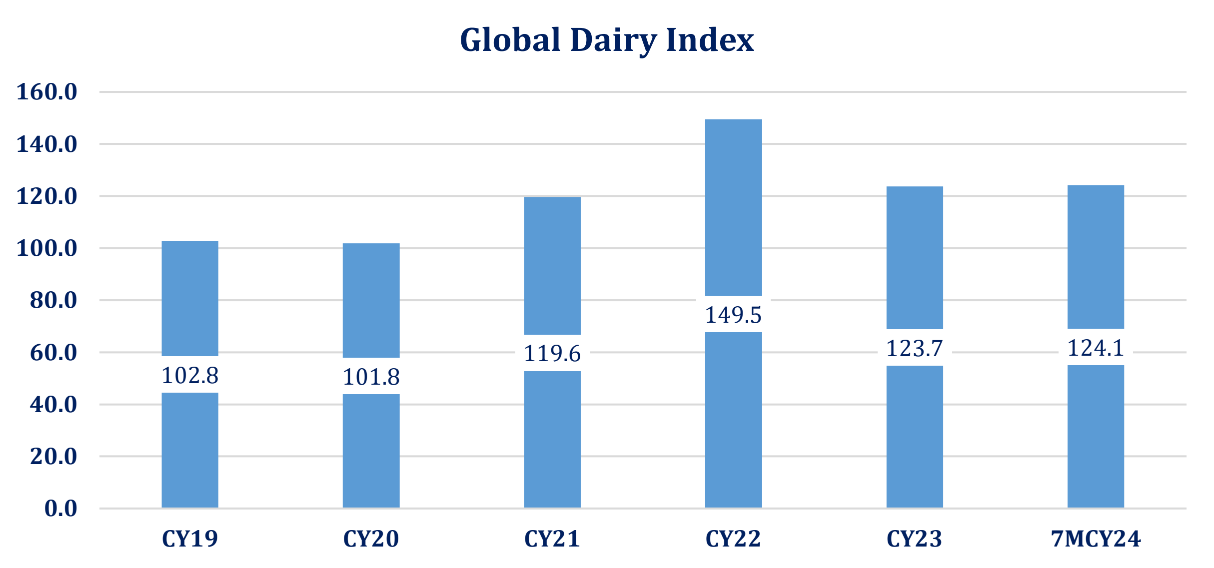
Note: *Data is representative of HS Codes 0401 and 0402.*

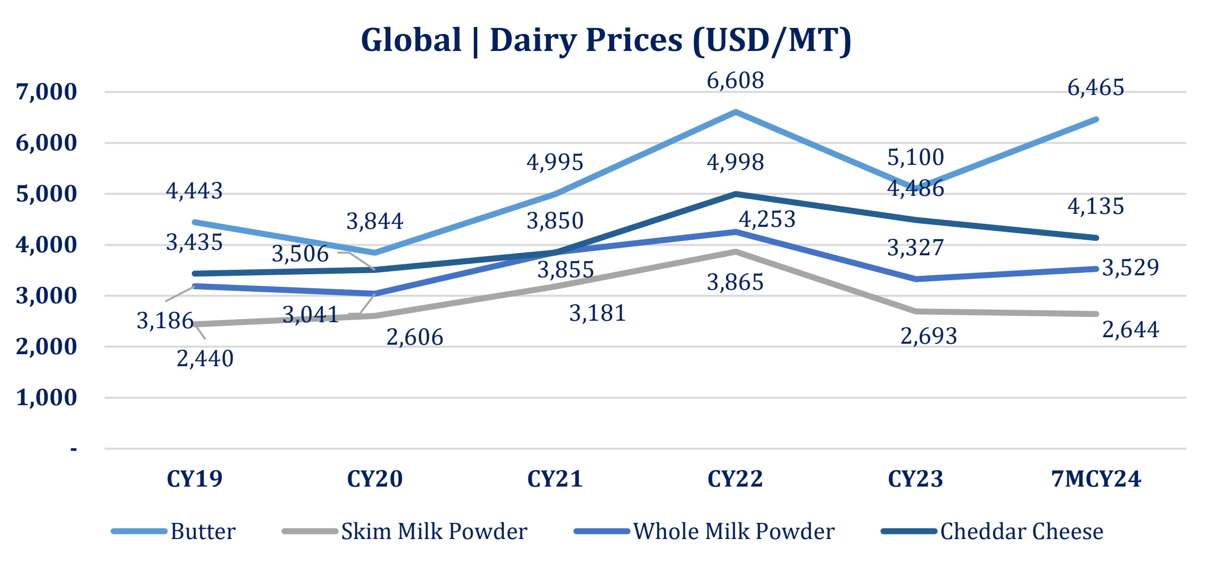
Source: UN Comtrade

Dairy

Global | Prices

- In CY22, the global dairy prices index rose ~29.9 points YoY, driven largely by constrained supply availabilities in Western Europe and Oceania, along with persistent import demand from North Asia and the Middle East. Higher demand for dairy products, especially butter, in Europe and elsewhere, amid shortages of sunflower oil due to disruptions of supplies from the Black Sea region, also contributed to this steep increase.
- In CY23, sharp decline in global dairy index (~21.0% YoY) was mainly driven by lower input costs and global consumption due to the high prices in CY22. The index averaged ~124.1 in 7MCY24 (SPLY: ~129.8), down ~5.7 points YoY, on the back of lower skim milk, whole milk powder which were enough to offset increases in butter and cheese prices. While the former resulted from lower import demand, especially for spot supplies, reflecting seasonal effect Western Europe, higher butter prices resulted from lower exportable availabilities, mainly in Western Europe, due to higher internal sales, tight inventories and seasonally falling milk production.
- Going forward, prices of butter and skim milk powder are foreseen to increase slightly in nominal terms during CY24-32, with resumption in input prices. World prices for whole milk powder and cheese are expected to be affected by butter and skim milk powder price trends, in line with the respective content of fat and non-fat solids.





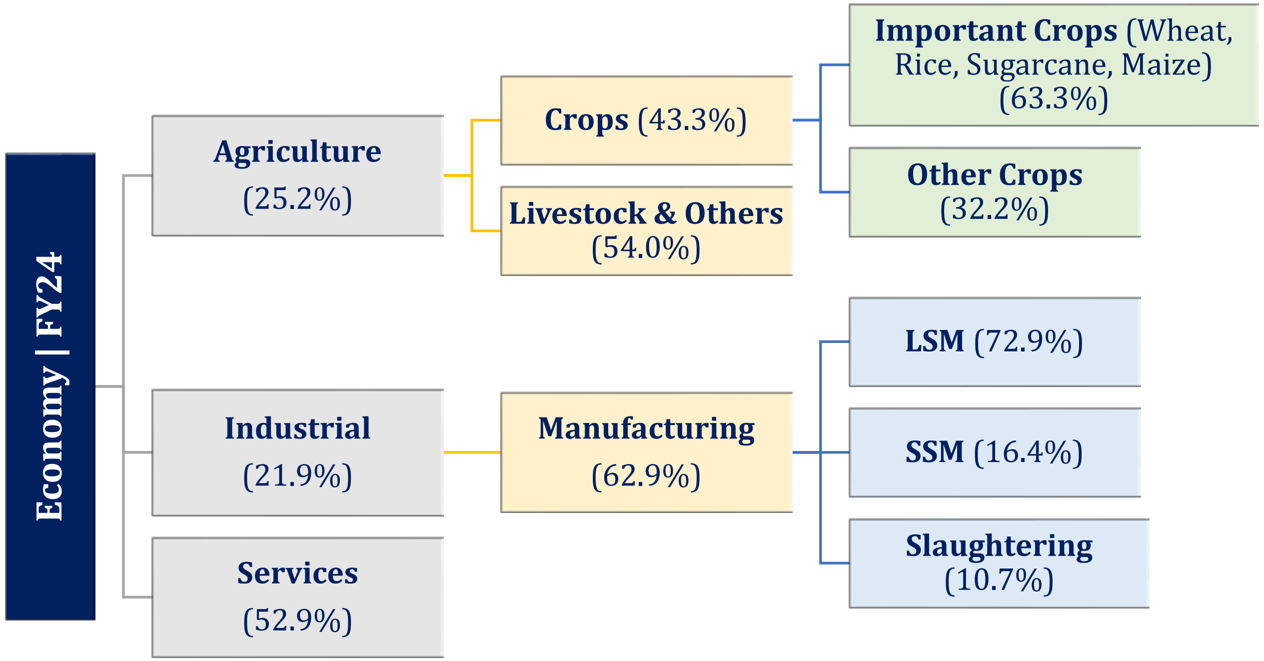
***Note**: The Dairy Price Index consists of butter, SMP, WMP, cheese price quotations; the average is weighted by world average export trade shares for 2014-2016.*

Source: FAO

Dairy

Local | Introduction

- In FY24, Pakistan's GDP (nominal) stood at PKR~106.0trn (FY23: PKR~83.9trn), increasing, in real terms, by ~2.8% YoY (FY23: ~-0.03% growth). Industrial activities in FY23 held ~21.7% share in the GDP while the manufacturing activities made up ~65% of the value addition. In 3QFY24, Pakistan's GDP (nominal) stood at PKR~25.4trn (3QFY23: PKR~20.6trn), rising in real terms by ~2.1% YoY (2QFY24: ~1.8% YoY). Real GDP growth rate (~2.1%) for 3QFY24 signals a moderate improvement in economic activity as compared to SPLY.
- The livestock sector is a significant component of agriculture, contributed ~54.0% to the value addition in agriculture and ~13.6% to the total GDP, alongside livestock during FY24. Fresh milk consumption accounts for ~97.0% of total consumption, with the remaining ~3.0% being processed Ultra High Temperature (UHT).
- Dairy farms are predominantly small-scale, focusing on subsistence or market-oriented farming, with some engaged in peri-urban or commercial-level operations.



Dairy

PACRA
Together. Creating Value.

Local | Snapshot

- Milk as a staple food is naturally rich in protein, calcium, vitamins, and other vital nutrients. Raw milk holds ~95% market share in Pakistan, whereas packaged milk only accounts for ~5%.
- Furthermore, there is a ~20% loss (~12.4bln liters annually) of milk due to limitations in the supply chain.
- Few challenges facing the local dairy sector include low productivity due to inadequate feed quality, prevalent diseases, and restricted access to essential services.
- Despite being one of the world's largest milk producers and consumers, Pakistan faces a troubling nutrition crisis. In CY22, ~34% of children under the age of 5 suffered from stunting, highlighting the persistent issue of malnutrition.
- As per Budget FY25, the imposition of ~18% GST on packaged milk is likely to worsen the malnutrition crisis in Pakistan, translating into higher milk prices.
- FrieslandCampina Engro Pakistan, a leading dairy company, introduced Olpers in 2006 and Tarang tea whitening products in 2007.
- Prema, operated by At-Tahur Ltd since its founding in 2007, offers high-quality pasteurized milk and other dairy products, sourced from its own modern dairy farm.

Particulars	FY21	FY22	FY23	FY24
Livestock (mln)*	206.9	212.6	218.6	224.7
Production | Milk (000 MT)*	63,684	65,745	67,873	70,071
Imports (PKR bln)**	65.8	20.7	9.3	-
Exports (PKR bln)**	1,837	972	912	-
Population (mln No.)	224.8	229.2	241.5	235.9
Association	Pakistan Dairy Association (PDA)			

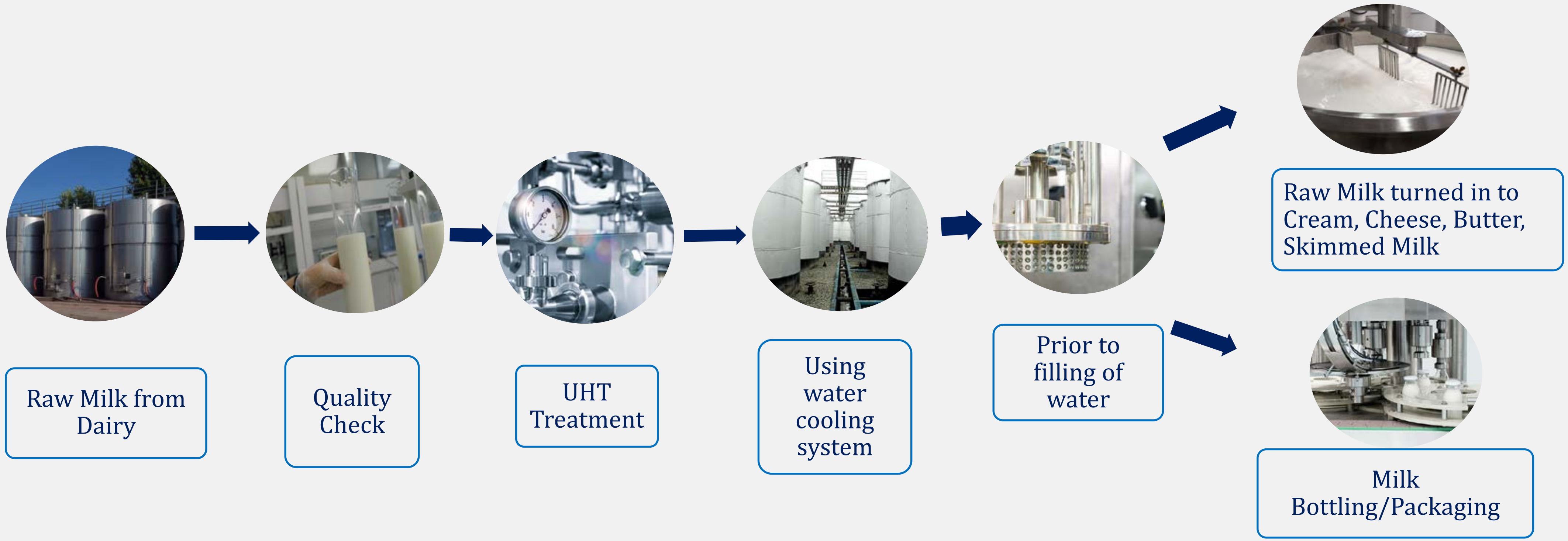
Note:. *9M data. ** Imports & Exports classified as Milk, cream, butter milk, & curdled milk as per PBS .

Source: PBS, PES

Dairy

Local | Dairy Processing

- Milk processing companies use milk as a raw material to formulate different types of milk i.e. pasteurized milk, UHT treated milk, condensed milk, skim milk & milk powder, etc.
- Different value added products like ghee, khoya, yogurt, ice cream, butter and cheese are also prepared from raw milk. Processed milk market has increased its share in quality conscious consumers. Processed milk has achieved ~4% share in Lahore milk market during the last two decades (FY21-23).



Source: SMEDA, FAO

Dairy

Local | Dairy Farming Overview

- Dairy production is an all-inclusive activity, related to dairy animal care, reproduction, feeding and management. It encompasses all aspects and activities related to raising dairy animals during various phases of life to get maximum productivity in terms of hygienic milk.

- **Animal Health:** The genetic worth of cows must be considered on top priority. Selection of animals with excellent body condition where average daily milk production of ~35 liters or above for cows in first lactation, essentially with no disease history is desirable.

- **Housing:** Good housing leads to good management practices and ultimately optimum production. Generally, housing should be; Pre-engineered building i.e. Tunnel-type, ventilated, comfortable and dry with hygienic environment and designed with the probability of future expansion when required. The housing should facilitate; easy drainage and removal of dung, urine and waste material, apparent (or feels like) temperature not exceeding 27 °C, minimum sun exposure.

- **Milking Hygiene:** Manual milking is common among smallholder farmers. Larger farms use milking machines and automated milking systems for efficiency and hygiene.

- **Nutrition (Feed & Water):** Traditional feed includes crop residues, green fodder, and locally available feedstuffs. Concentrate feed and balanced nutrition supplements are used on commercial farms to increase milk production.

- **Animal Welfare:** A lot of emphasis is on preventive measures and proper disease management practices. Regular vaccination and deworming programs are also carried out.

Source: SMEDA, FAO

Local | Dairy Farming Overview

- Common dairy breeds in Pakistan include Nili-Ravi, Kundi buffaloes and Red Sindhi cows. Crossbreeding with foreign breeds like Holstein Friesian and Jersey is also practiced to improve milk yield.

- The Environmental Controlled Housing (ECH) system is a new and remarkable revolution in Pakistan's dairy sector by creating a self-sufficient temperature and humidity level in dairy house. Dairy farms use ECH systems to maintain optimal living conditions for livestock, ensuring consistent temperature, humidity, air quality, and lighting.

- The dairy cows are fed Total Mixed Ration (TMR), which is a high energy and protein rich nutritionally balanced formulated feed. It includes dry matter derived from ~60% roughages and ~40% concentrate containing ~17-18% Crude Protein (CP) and energy to increase animal productivity. This prefeasibility study suggests to offer cows with commercially prepare.

- Ideal locations are rural and peri-urban areas around major cities with abundant water and feed, access to livestock markets, and veterinary services. Major cities like Lahore, Karachi, Multan, Rawalpindi, and Faisalabad are key markets for milk due to high demand.

- Daily milk intake in Lahore and Karachi is ~3mln and ~5mln liters, respectively. The processed milk market has grown, with a ~4% share in Lahore, and the overall milk supply increases by ~4% annually, while demand grows by ~15% annually.

Source: SMEDA

Dairy

Local | Dairy Farming Overview

Description	~50 Cows	~75 Cows	~100 Cows
Initial Employment	~6 Individuals	~6 Individuals	~9 Individuals
Employment at year 10	~20 Individuals	~26 Individuals	~35 Individuals
Initial Milk Production Capacity Utilization	~75%	75%	~75%
Maximum Milk Production Capacity Utilization	~90%	~90%	~90%
Average Milk Production per Cow per Lactation	~11,000-12,000 liters	~11,000-12,000 liters	~11,000 – 12,000 liters
Milk Production in year 1 (at ~75% capacity)	~383,250 liters	~574,875 liters	~766,500 liters
Annual Mortality Rate for Newborn Calves	~5%	~5%	~5%
Annual Mortality rate for Adult Cows	~1%	~1%	~1%

Note: *Data pertains to a dairy farm with ~50, ~75 & ~100 cows.*

Source: SMEDA

Dairy

Local | Raw Material Requirement

Daily Feeding Requirements for One Wet Cow*

Description	Daily Feed Allowance (Kgs)	Rate (PKR/ Kg)	Feed Cost (PKR/Day)	Milk Days (No.)	Total Cost (PKR/ Cow)
Total Mixed Ration (TMR)	21	74	1,554	305	473,970

Daily Feeding Requirements for One Dry Cow*

Description	Daily Feed Allowance (Kgs)	Rate (PKR/ Kg)	Feed Cost (PKR/Day)	Dry Days (No.)	Total Cost (PKR/ Cow)
Total Mixed Ration (TMR)	17.5	47	822.5	60	49,350

**One lactation period of cow is estimated to be 305 +_ 5 days and dry period is 60 days.*

Source: SMEDA

Dairy

Local | Dairy Farming Types

Aspect	Small-Scale Dairy Farming	Large-Scale Dairy Farming
Farm Size	~2-10 animals per farm	~50-1,000+ animals per farm
Production System	Traditional methods, often grazing on common lands	Modern, intensive systems with controlled feeding regimes
Breed Types	Local breeds (e.g., Nili-Ravi buffalo, Sahiwal cows)	Exotic breeds (e.g., Holstein Friesian) and crossbreeds
Milk Production	~4-6 liters per cow per day	~15-25 liters per cow per day
Advantages	Low input costs, Resilient local breeds, Provides rural employment	Higher productivity, Better market integration, Economies of scale
Challenges	Low productivity, Limited market access, Lack of resources and training	High input costs, Dependency on technology and imports

Source: SMEDA

Dairy

Local | Milk Production Systems

- **Smallholder subsistence production system:** The smallholder subsistence production system in Pakistan involves farmers who produce milk primarily to meet their family's needs, with limited market access. Typically, these farms have ~3 buffaloes, with an average milk yield of ~3 liters per animal per day. Production relies on noncash resources like family-owned land and labor, and ~70% of smallholder farmers fall into this category.

- **Smallholder market-oriented production system:** The smallholder market-oriented production system is evolving from subsistence farming. Typically, households have ~5–7 animals, including cows and buffaloes, with ~3–4 being lactating. Feeding includes fodder, wheat straw, and seed cake. Over ~70% of the milk is sold directly to retail shops or intermediaries.

- **Rural commercial production system:** Since 2006, Pakistan's dairy sector has shifted towards commercial farming, with progressive farmers investing in larger operations. A typical rural commercial dairy farm has about ~30 animals. The farm sells over ~90% of its milk, with average yields of ~10 liters per animal per day. Milk is marketed through commercial milk collection companies, making this system the second largest contributor to commercial milk collection after large peri-urban farms.

- **Peri-urban production system:** The peri-urban production system involves commercial dairy farms on the outskirts of major cities. These farms range from small ~20-200 animals to large ~200-2000 animals, averaging ~50 animals per farm These farms use both family and hired labor, with the latter paid at urban rates, and deliver milk to the market daily. Milk is sold directly to city retail shops after de-creaming, with a focus on selling nearly all the milk produced.

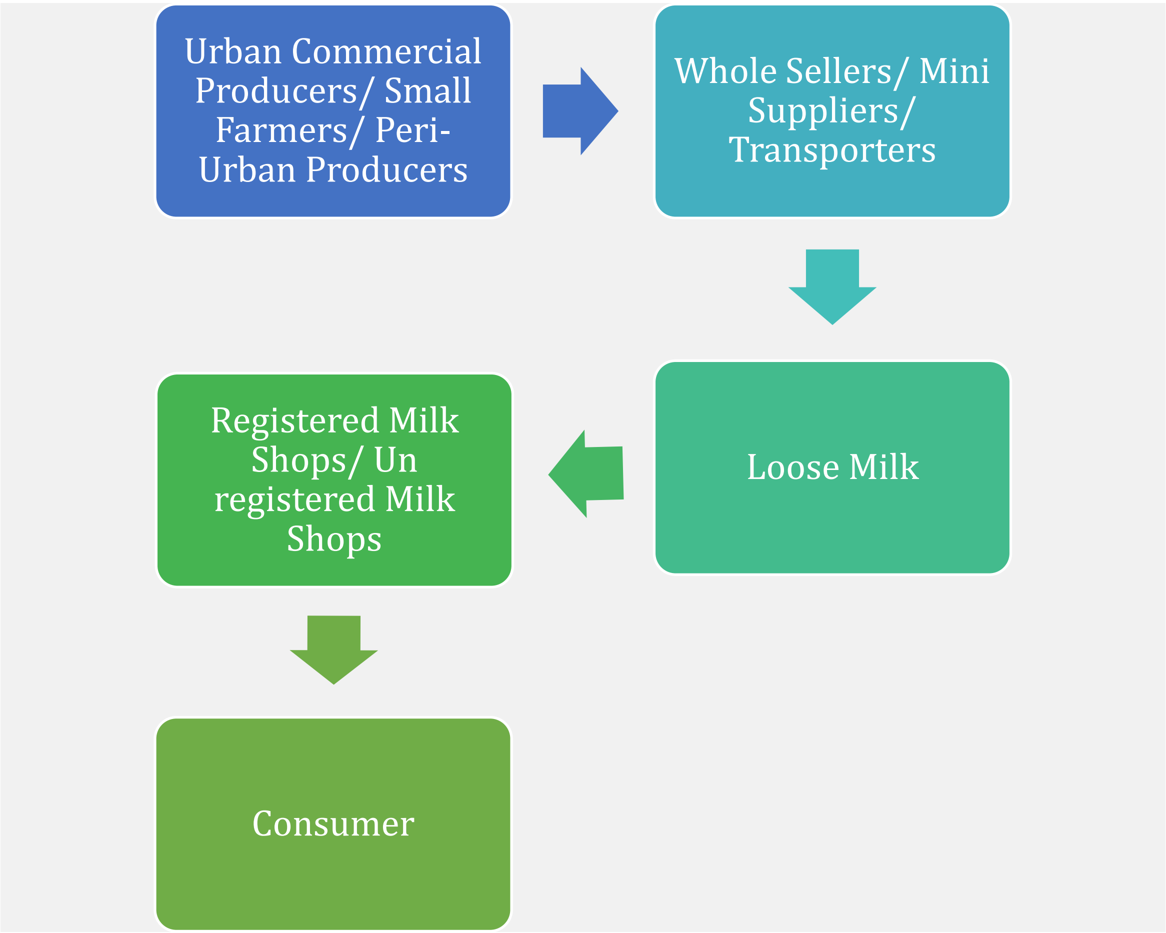
- **Large peri-urban commercial dairy farms**: These dairy farms, driven by urbanization over the past two to three decades, focus on maximizing milk production with high-quality feeding and management. These farms, known as corporate or mega farms, use elite breeds like Holstein Friesians and their crosses, producing around ~25 liters of milk per day per animal. They operate with high inputs i.e. advanced feeding, and machinery. Although these farms make up less than ~1% of total dairy operations in Pakistan, they collectively produce significant volumes of milk, ranging from ~20,000 to ~100,000 liters per day.

Source: FAO

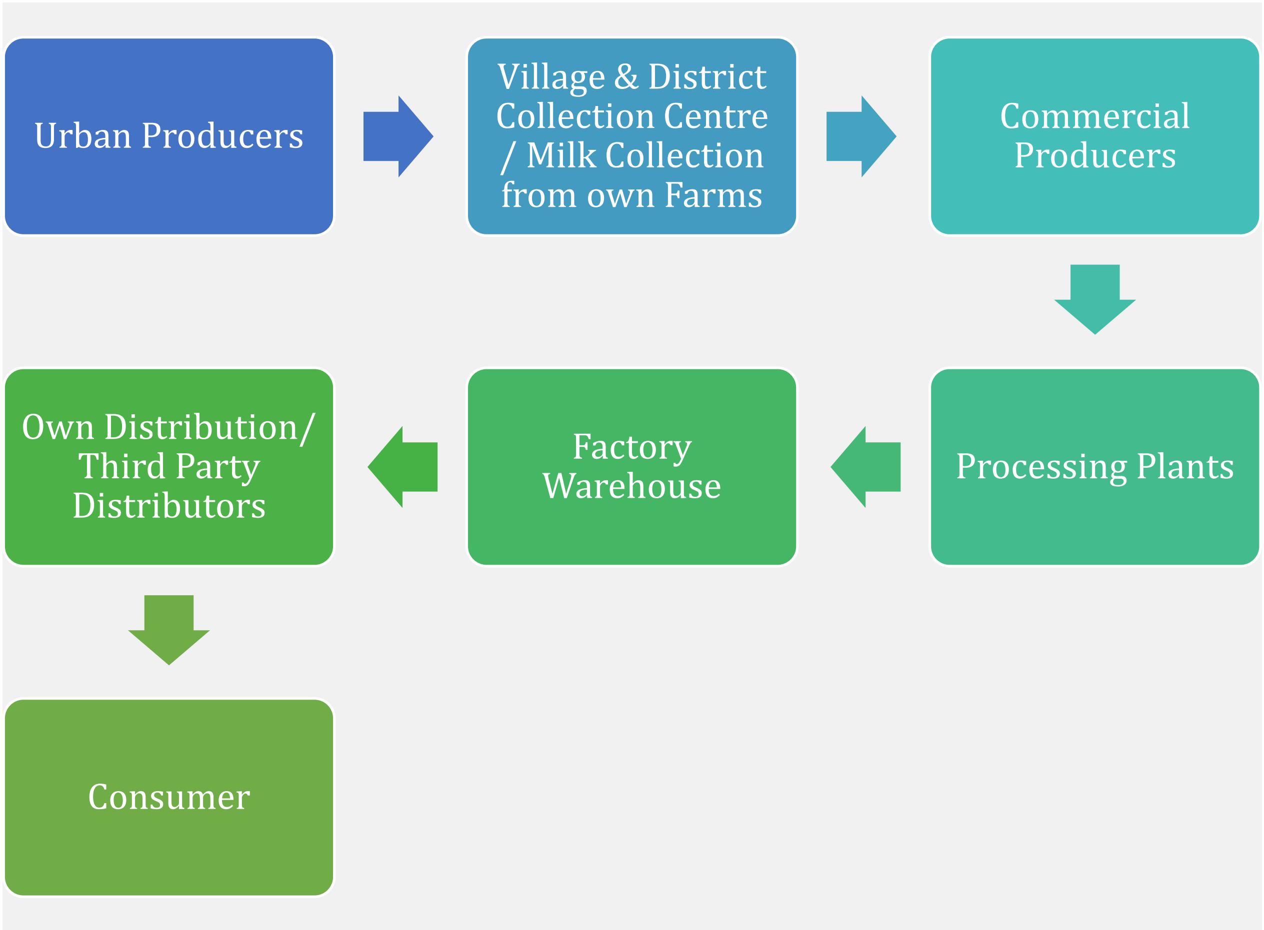
Dairy

Local | Supply Chain

Supply Chain | Loose Milk (Unorganized Segment)



Supply Chain of Packaged Milk (Organized Segment)



***Note**: District Price Regulations apply when setting the price, Food & Health Authority insures quality control checks.*

Source: TDAP

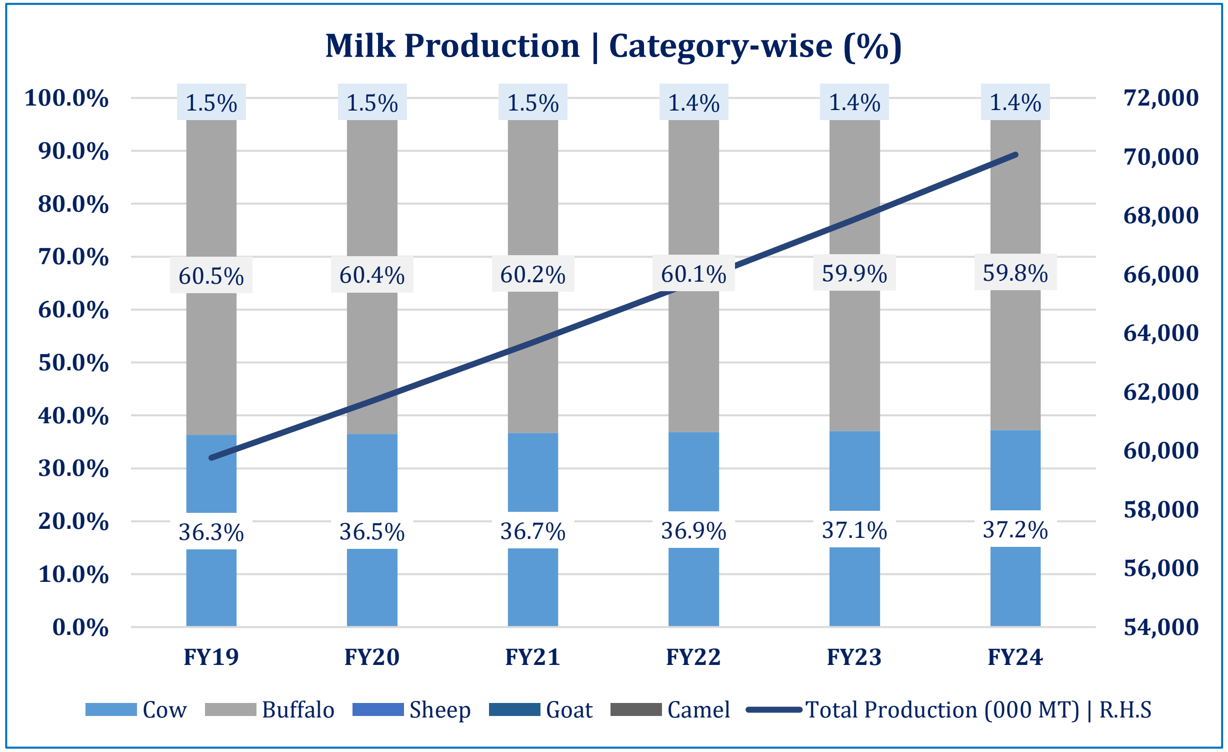
Dairy

Local | Production

- During FY22-24, there has been an overall increase in milk production from ~65.7mln MT to ~70.1mln MT (CAGR: ~7.8%). In FY24, the growth is most pronounced in buffalo and cow milk production with a ~3.0% YoY and ~3.8% YoY increase respectively.
- Cows, buffaloes and goats cumulatively comprised ~98.5% of the total milk produced in FY24 (SPLY: ~98.5%), while recording ~3.7%, ~2.9% and ~2.6% YoY increase, respectively.
- Of the gross milk production, ~80.5% was fit for human consumption in FY24 (SPLY: ~80.6%).

Local | Milk Production ('000' MT)

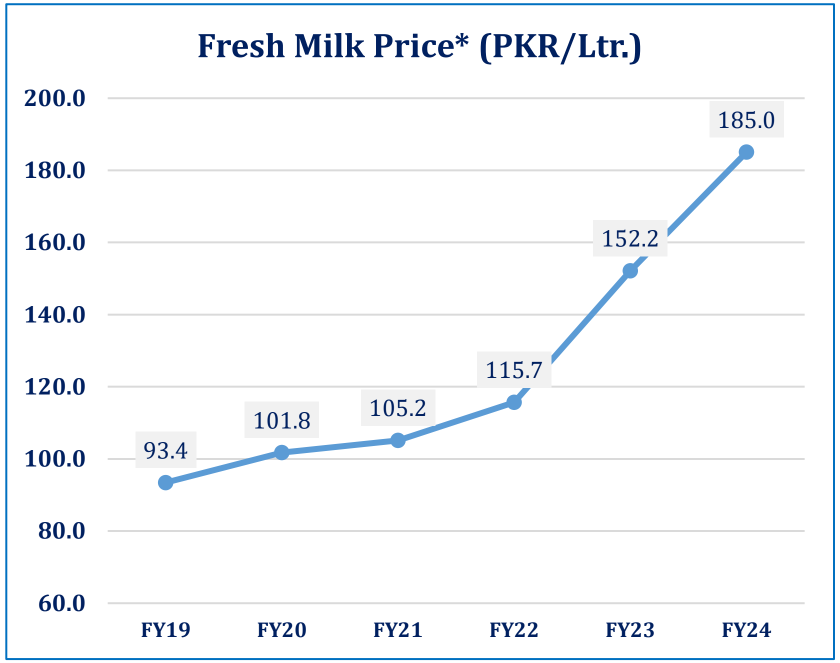
Livestock	FY20	FY21	FY22	FY23	FY24
Buffaloes	37,256	38,363	39,503	40,678	41,887
Cows	22,508	23,357	24,238	25,151	26,099
Goats	965	991	1,018	1,046	1,074
Camels	920	932	944	956	956
Sheep	41	41	42	42	42
Total	**61,690**	**63,684**	**65,745**	**67,873**	**70,071**

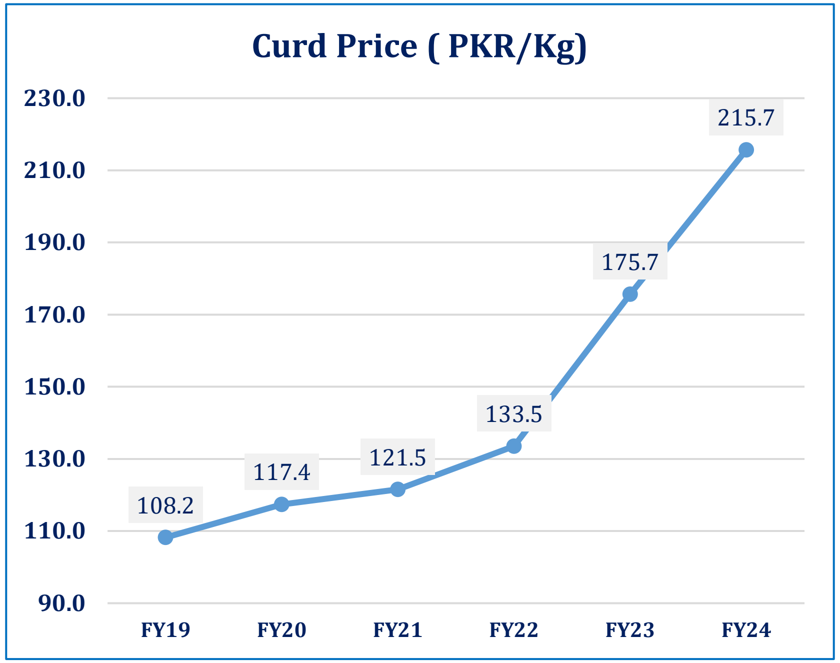


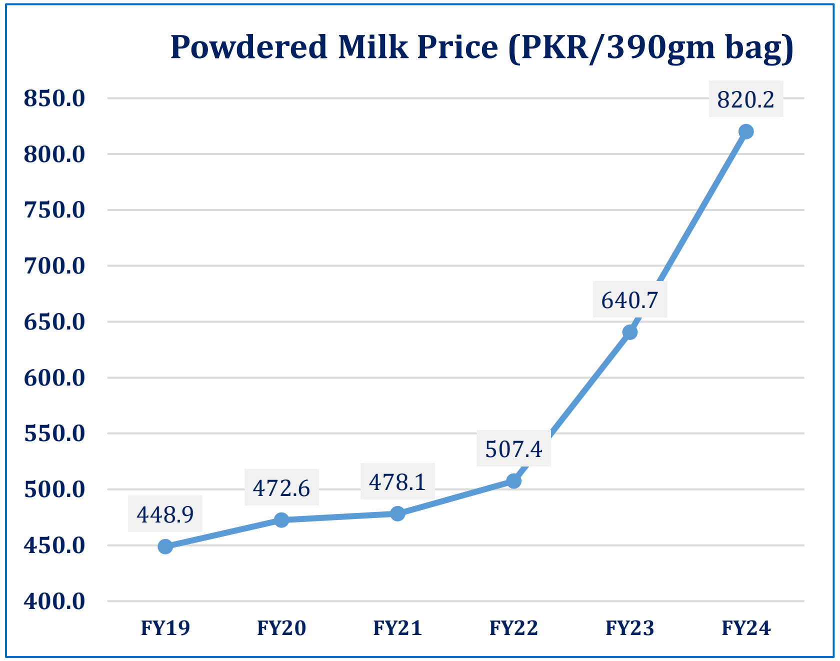
Dairy

Local | Prices

- Domestic prices for fresh milk averaged at PKR~152.2/liter in FY23, increasing ~31.5% YoY, in line with overall high inflationary levels. In FY24, these have further increased ~21.6% YoY, averaging at PKR~185.0/liter.
- Domestic prices for curd averaged at PKR~175.7/Kg in FY23, increasing ~31.6% YoY. In FY24, these have further increased ~22.8% YoY, averaging at PKR~215.7/Kg.
- Domestic prices for Powdered milk averaged PKR~640.7/390gm in FY23, increasing ~26.3% YoY. In FY24, these have further increased ~28.0% YoY, averaging at PKR~820.2/390gm.
- Rising fresh milk prices increase the production costs for curd and powdered milk, prompting producers to raise retail prices to maintain profit margins.







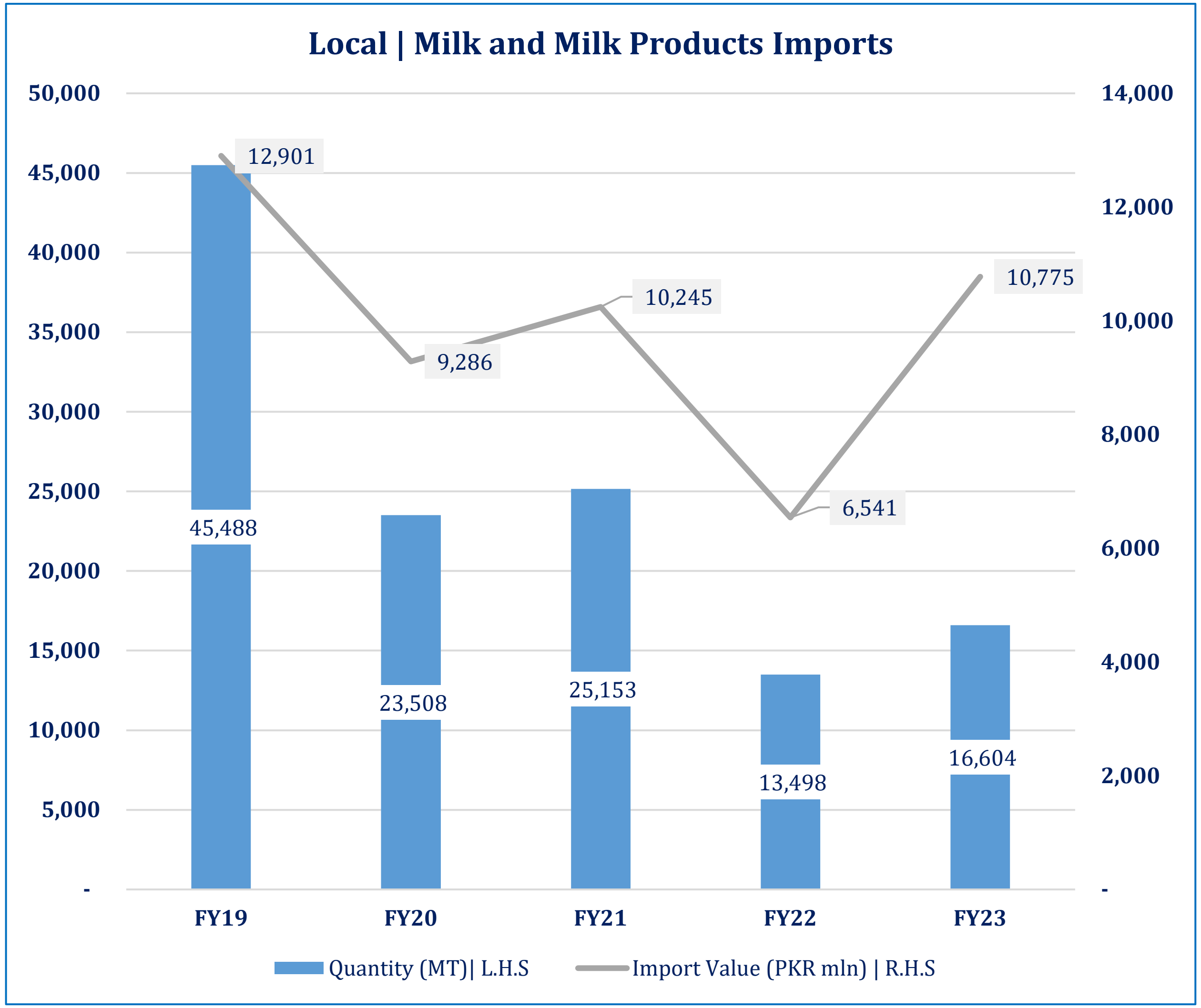
*For human consumption.

Source: PES, PBS, UN, FAO

Dairy

Local | Imports

- During FY23, dairy imports (milk, cream, butter and curd) were recorded at PKR~10.8bln (FY22: PKR~6.5bln), up ~66.2% YoY. During the year, dairy imports formed ~0.1% of the country's total import bill.
- Despite its status as a major milk producer, Pakistan imports significant amounts of milk to satisfy demand for high-quality and specialized dairy products not adequately produced locally.
- Low productivity, high feed costs, and inadequate infrastructure necessitate milk imports in Pakistan, often making imported dairy products more cost-effective due to higher efficiencies abroad.



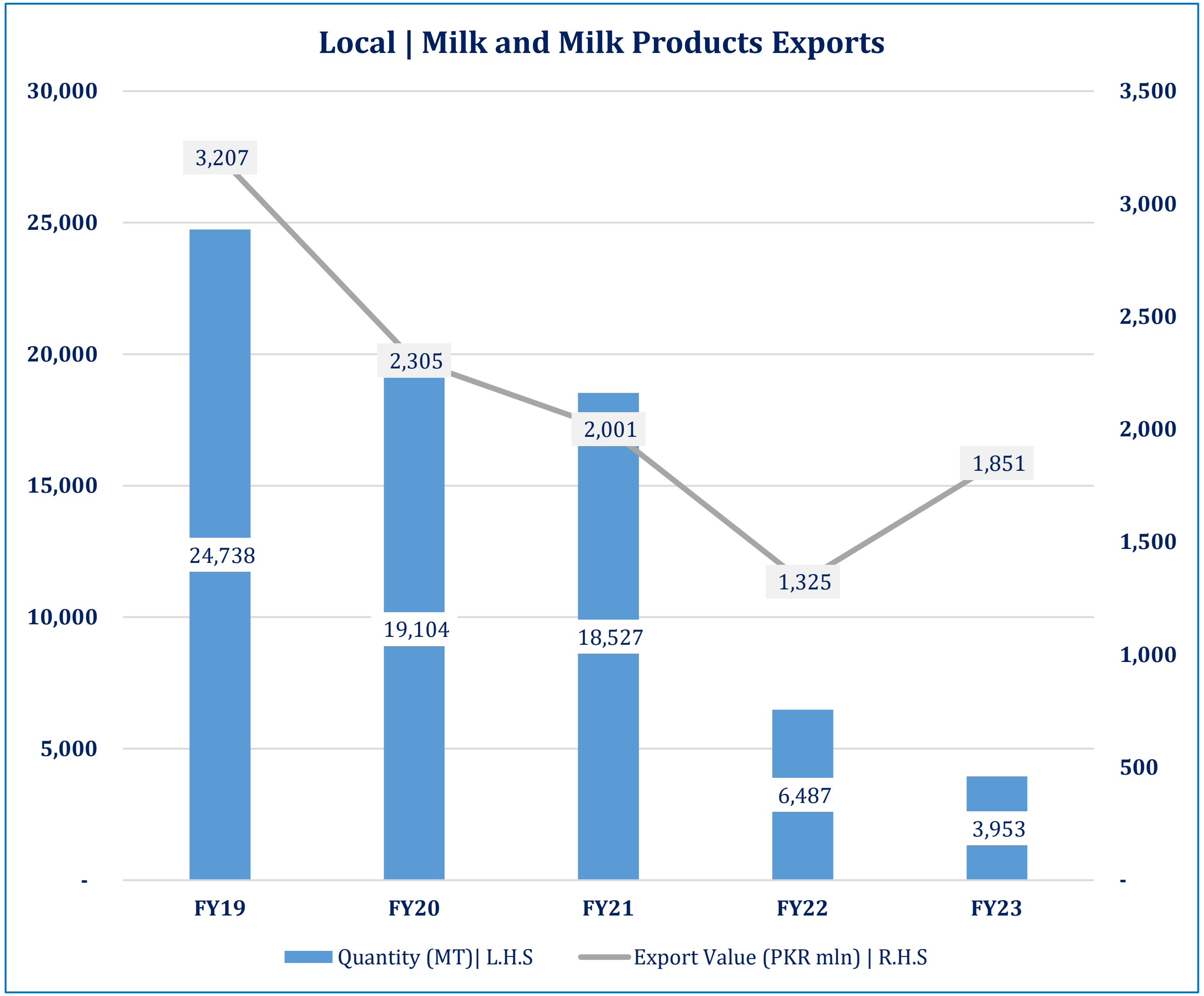
***Note**: Data pertains to exports classified as Milk, cream, butter milk, & curdled milk as per PBS (HS Codes 401, 402, 403, respectively).*

Source: PBS

Dairy

Local | Exports

- During FY23, dairy exports (milk, cream, butter and curd) were recorded at PKR~1.9bln (FY22: PKR~1.3bln), up ~46.2% YoY. However, exports of Milk, Cream and Butter in volumetric terms during FY23, declined by ~39.1% YoY to clock in at ~3,953MT (FY22: ~6,487MT), depicting therefore currency depreciation of ~39.0% YoY during the year.
- A significant reason for the drop in milk exports from Pakistan in FY23 is attributed to low productivity and weak supply chain issues within the dairy sector.
- Pakistan's dairy sector, despite its vast size, remains largely informal and consists predominantly of smallholder farms.
- These farms typically lack access to modern technology and veterinary services, which significantly impacts productivity. This inefficiency in production not only affects domestic supply but also limits the capacity for export due to inconsistent quality and volume.



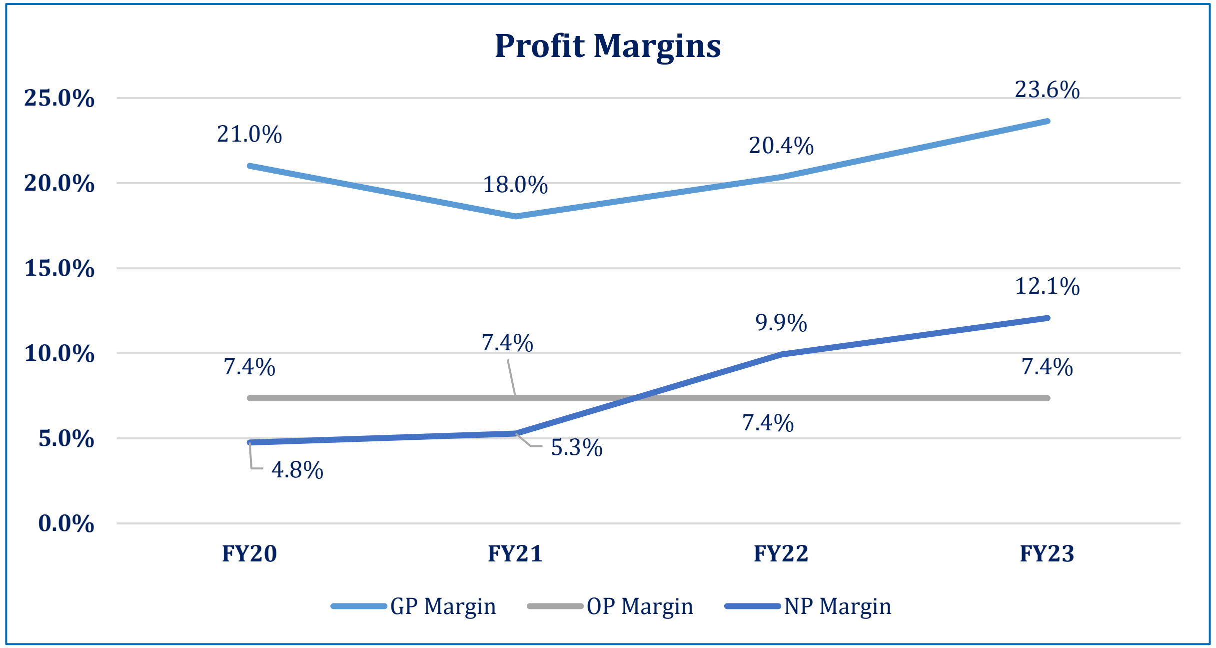
__Note__: Data pertains to exports classified as Milk, cream, butter milk, & curdled milk as per PBS (HS Codes 401, 402, 403 respectively).

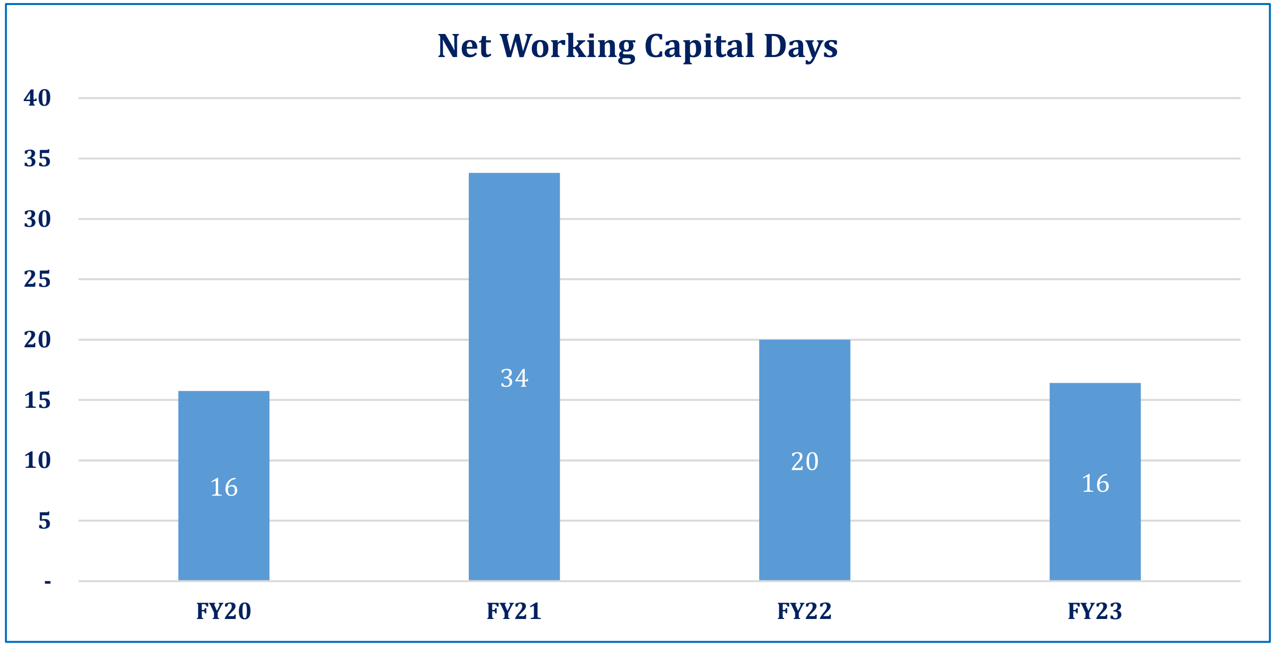
Source: PBS

Together. Creating Value.

Local | Business & Financial Risk

- With the overall increase in revenue in FY23 ~34.3% YoY, the gross margin experienced a increase to ~26.9% (FY22: ~23.6%) as the burden of the increase in raw material prices was shifted to the consumer.
- Average operating margin also increased to ~7.4% from ~1.4% attributing to advances in dairy farming technology, better feed management, and streamlined production processes reducing costs and increase productivity, thereby boosting operating profits. Net profit for FY23 was reported higher at ~12.1% (FY22: ~9.9%), driven mainly by unprecedented gains arising from changes in fair value of dairy stock due to devaluation of local currency. In 9MFY24, average gross margins clocked in at ~26.9%, while average net margins came in at ~3.6%.
- There is a significant reduction in net working capital days over the years from ~34 days in FY21 to ~16 days in FY23. This improvement suggests that the dairy sector enhanced its operational efficiency, possibly through better inventory management or faster collection of receivables.





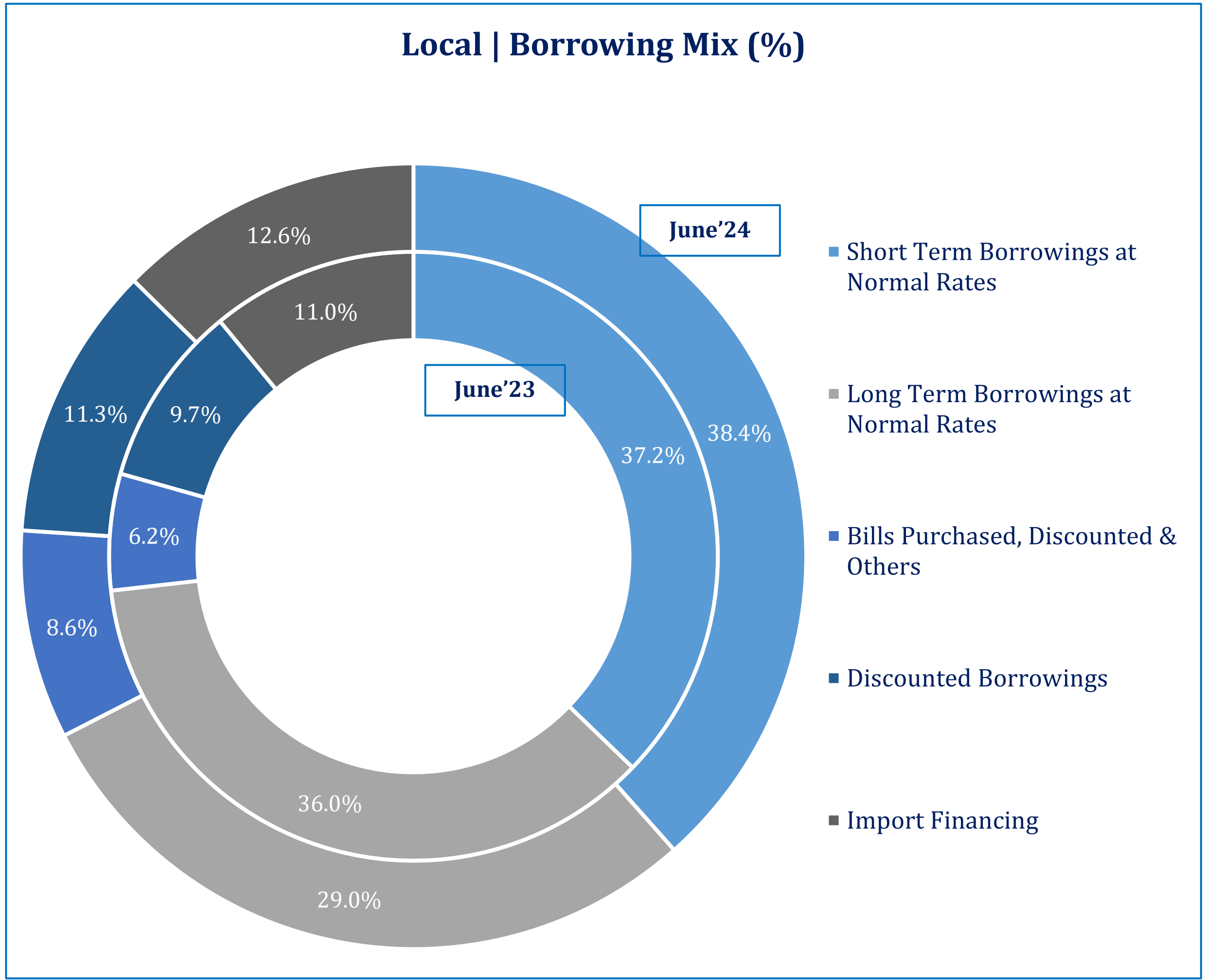
***Note**: Calculations based on ~4 PACRA-rated/ selected dairy farm financials. 9MFY24 data is reflective of ~02 sector players.*

Source: PACRA Database

Dairy

Financial Risk | Borrowing Mix

- The total borrowings of the sector as at End-Jun'24, stood at PKR~48.6bln (End-Jun'23: PKR~61.0bln), down ~20.5% YoY.
- Long-term borrowings at normal rates as at End-June'24 comprised ~38.4% of the total borrowings (End-June'23: ~36.0%) and stood at PKR~14.0bln (End-June'23: PKR~21.9bln), down ~35.9% YoY.
- Short-term borrowings at normal rates as at End-June'24 that comprised of ~38.4% of the total borrowings (End-June'23: ~37.2%) decreased by ~17.8% YoY to clock in at PKR~18.6bln (End-June'23: PKR~22.7bln).
- Discounted borrowings comprising LTFF and EFS represented ~11.3% of total borrowings and stood at PKR~5.5bln as at End-June'24 (End-June'23: PKR~5.8bln), registering a decline of ~8.4% YoY.
- Import financing held ~12.6% share in total borrowing and stood at PKR~4.1bln (End-June'23: PKR~3.7bln), up ~10.7% YoY as SBP withdrew import restrictions in Jun'23.



***Note:** Data pertains to SBP Classification "Manufacture of Dairy Products"*

Source: SBP

Dairy

SWOT Analysis

- **High Demand for dairy products:** Milk, cheese and yogurt are staple items in many diets.
- **Diverse Product Range:** Catering to different consumer preferences and market segments.
- **Employment Opportunities**: From farming and processing to distribution and retail.
- **Technological advancements** improving efficiency and productivity.

- **High Production Costs**: Cost for feed & equipment can be high.
- **Dependency on climate**: Climate conditions can affect milk production & quality.
- **Market Volatility:** Prices can fluctuate due to changes in supply & demand.
- **Labor Intensive:** Requires significant manual effort for milking, feeding etc.

- **Disease Outbreaks**: Livestock diseases can severely impact milk production and quality.
- **Economic Instability**: Economic downturns or fluctuations in currency exchange rates can impact profitability for export dependent dairy farms.
- **Consumer preferences**: Shifts in consumer preferences towards plant-based or alternative milk products can affect traditional dairy sales.

- **Growing demand in emerging markets:** Rising incomes and changing diets increase demand for dairy products.
- **Technological Innovation:** Can improve efficiency i.e. precision farming, better disease management and feed formulations.
- **Sustainable Practices:** Adoption of sustainable and environmental friendly practices can attract environmentally conscious consumers and reduce costs.

Dairy

Outlook: Stable

- In FY24, Pakistan's GDP (nominal) stood at PKR~106.0trn (FY23: PKR~83.9trn), increasing, in real terms, by ~2.8% YoY (FY23: ~-0.03% growth). Industrial activities in FY23 held ~21.7% share in the GDP while the manufacturing activities made up ~65% of the value addition. In 3QFY24, Pakistan's GDP (nominal) stood at PKR~25.4trn (3QFY23: PKR~20.6trn), rising in real terms by ~2.1% YoY (2QFY24: ~1.8% YoY). Real GDP growth rate (~2.1%) for 3QFY24 signals a moderate improvement in economic activity as compared to SPLY.
- In Pakistan, ~97% of dairy consumption is fresh milk, with the remaining ~3% being UHT processed. Despite Pakistan's status as one of the world's largest milk producers and consumers, the dairy sector struggles with low productivity and a ~20% annual loss of milk due to supply chain issues. Additionally, a new 18% GST on packaged milk in FY25 is expected to exacerbate the country's nutrition crisis, where ~34% of children under five already suffer from stunting.
- In Pakistan, dairy production systems range from smallholder, to large peri-urban commercial farms driven by urban demand and focusing on high-yield dairy breeds for mass milk production, reflecting a diverse and evolving dairy sector.
- In FY24, Pakistan's Gross milk production was recorded at ~70.1mln MT, with significant growth in buffalo and cow milk production, reflecting enhanced demand and improved dairy farming practices. In FY23-24, domestic prices for fresh milk, curd, and powdered milk in Pakistan rose significantly, reflecting broader inflationary trends and leading to higher production costs that prompted increases in retail prices to sustain profit margins.
- During FY23, dairy imports (milk, cream, butter and curd) were recorded at PKR~10.8bln (FY22: PKR~6.5bln), up ~66.2% YoY. During the year, dairy imports formed ~0.1% of the country's total import bill. During FY23, dairy exports (milk, cream, butter and curd) were recorded at PKR~1.9bln (FY22: PKR~1.3bln), up ~46.2% YoY. However, exports of Milk, Cream and Butter in volumetric terms during FY23, declined by ~39.1% YoY to clock in at ~3,953MT (FY22: ~6,487MT), depicting therefore currency depreciation of ~39.0% YoY during the year.
- In FY23, Pakistan's dairy sector saw a ~34.3% revenue increase with a rise in gross margin to ~26.9%, operating margin to ~7.4%, and net profit to ~12.1%, driven by advancements in dairy technology, improved feed management, and favorable currency devaluation impacts, alongside a reduction in net working capital days from ~34 to ~16 days, indicating enhanced operational efficiency.
- The dairy sector in Pakistan could significantly transform with sustained investments in infrastructure, technology, and farmer training, alongside the development of cooperative models and an enhanced dairy value chain.

Dairy

Bibliography

- Pakistan Economic Survey (PES)
- Pakistan Bureau of Statistics (PBS)
- State Bank of Pakistan (SBP)
- Ministry of Finance
- TDAP
- USDA
- UN Comtrade
- FAO
- SMEDA
- PACRA Database

Research Team	**Saniya Tauseef** Senior Manager saniya.tauseef@pacra.com	**Ayesha Wajih** Assistant Manager ayesha.wajih@pacra.com	**Sundus Fatima** Senior Research Analyst Sundus.fatima@pacra.com
Contact Number: +92 42 35869504			

DISCLAIMER