



INDIAN DAIRY INDUSTRY

Inelastic demand for milk and lower procurement prices to keep dairy industry healthy; higher SMP stock to exert liquidity pressure especially for cooperative sector

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OUTLOOK:

Liquid milk/Integrated milk products producers: Stable

Pure-play Ice-cream producers: Negative

Covid-19 Impact and Outlook: Stable Outlook for liquid milk and integrated milk products manufacturers; outlook Negative for pure-play ice-cream manufacturers

- Globally, the dairy supply chain has been impacted by the Covid-19 pandemic, especially for countries dependent on imports. While other food sectors have also been impacted, globally dairy has seen a much harder hit during the lockdown phase because the products are highly perishable. Despite demand for milk increasing with consumers displaying a propensity to save and stock-up essentials such as milk, the supply chains have been impacted with logistics being a challenge. In the Indian context, since the supply is localised and with the high dependence on milk and milk products such as ghee, curd, butter as staple food, the overall impact is not expected to be severe.
- As per ICRA research, integrated milk and milk products producers are unlikely to face any major demand or supply issues. There is enough demand for liquid milk and its sales is expected to grow at 4%-5% in FY2021. Value-added products (VADP) such as ghee and curd are also expected to sustain muted demand owing to the nature of the products as well as higher home consumption during the lockdown period. Sales to the institutional segment for dairy products, especially cheese has been adversely impacted, especially though the same is expected to recover during H2 FY2021 as several state governments have allowed home deliveries and restaurants to operate. Certain categories such as ice-cream will face higher volume contraction owing to the lockdown during the peak sales season and the common averseness to consuming cold products during the course of the pandemic. ICRA has a Stable outlook for integrated dairy producers and a Negative outlook for pure-play ice-cream producers. Below we have provided an overview of the key credit drivers for the dairy industry and the impact of Covid-19 on the sector followed by detailed explanation:

Exhibit 1: Impact of Covid-19 on organised dairy industry credit drivers:

Credit Drivers	Impact	Description
Milk availability	Low	Milk production expected to grow at 4-5% in FY2021
Milk demand	Low	Fairly stable led by inelastic demand & gradual reopening of economy
Supply chain & distribution	Moderate	Essential commodity; though some disruption owing to pandemic
Volatility in milk prices (Gross Margins)	Low	While procurement prices have plunged, retail prices have remained elevated benefitting dairy companies' gross margins for FY2021
Inventory levels (Liquidity)	Moderate	Build-up of excess SMP inventory during lockdown period may lead to stretched liquidity and higher debt levels in FY2021
Capex (Cash flows)	Low	Expected to moderate till Covid-19 situation normalises supporting cash flows and debt protection matrix

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Milk availability: Milk production to grow at 4-5% in FY2021 and 5.0% CAGR over FY2020-2023

- India is the largest producer as well as consumer of milk and milk products in the world, accounting for 22% of the total global production. The production in FY2020 is estimated to be 192 MMT, out of which 188 MT was consumed. ICRA expects the milk production to rise to 200-202 MMT in FY2021, backed by the normal monsoons and adequate availability of cattle feed.
- The raw milk availability in India is seasonal with higher production during the cooler months (70%; Flush season: September to February) and lower in the warmer months (30%; Lean season: March to August), given its tropical climate. To handle these seasonal variations, dairy processors produce skimmed milk powder (SMP) during the flush season, which has a higher shelf period and later reconstitute it to milk during the lean season. The milk procurement volumes rise from September and peak in October-February with maximum procurement during Q3. Given good monsoon conditions with no major instances of flooding, which could impact the availability of cattle feed coupled with a disease outbreak, ICRA expects the volumes to grow at 4-5% in FY2021.
- ICRA also expects the milk production to grow at a CAGR of 5.0% over the FY2020-23e, in line with 5.5% growth experienced from FY2013-20 period supported by various Government initiatives. Recent Central Government support in the form of Rs. 15,000.0-crore Animal Husbandry Infrastructure Development Fund (AHIDF) to increase private sector investment in dairy processing; the Rs. 13,343-crore outlay for controlling Foot & Mouth & Brucellosis diseases through 100% vaccination; interest subventions schemes; increasing milk production and share of organised segment through other schemes augur well for the sector. Various state governments also provided incentives in the form of milk subsidies, export incentives, interest subvention among others.

Demand for milk/milk products: Liquid milk volumes to grow at 3-5% while value-added products to see muted growth; healthy long-term demand outlook

- Approximately 54% of the total milk produced is marketable milk while the rest is self-consumed. Out of the total marketable milk approximately 70% is distributed through traditional milkmen while the remaining is through the organised segment. This segment comprising co-operatives as well as private players is estimated to be Rs. 3.1 trillion in FY2020. The initial pan-India lockdown imposed by the Government had impacted milk consumption with the closure of the hotels, restaurants, cafes (HoReCa) as well as sweetmeat shop and ice-cream parlours. During the initial phase of the lockdown (Q1 FY2021), lower demand led to decline in turnover; though the same has subsequently picked up.

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- Milk contributes to approximately 55-60% for the organised segment revenues and is expected to grow by 3-5% in volume terms in FY2021, despite the impact of Covid-19. This is by virtue of the inelastic demand for milk, which assumes high importance in private household consumption, both as a staple and for health benefits. Traditional value-added products like ghee (13-14% of organised sector) will see muted volume growth owing to lower institutional sales during the lockdown but it will get compensated to some extent by higher retail sales. Products like cheese (3-4% of organised sector) will see a 10-15% YoY decline, led by lower institutional sales during H1 FY2020 as the HoReCa segment was closed.
- The ice-cream segment (3-4% of organised segment revenues) is likely to witness a much higher decline as 40-50% sales happen during Q1, which was impacted the most owing to the lockdown. Pure-play ice-cream manufacturers will face difficulties as the peak summer season (Q1 FY2021) was washed off due to the lockdown. The first quarter generates 45-50% of the turnover and 70-80% of the yearly EBIDTA for ice-cream players. Further, averseness in consuming cold products while the pandemic continues may also dent future demand.

Increasing per-capita income, large vegetarian population and urbanisation supports long-term growth

- India's estimated GDP per capita of Rs 1,51,677 in FY2020 recorded growth at a CAGR 9.0% during FY2015-2020. While the per-capita income is estimated to decline owing to the pandemic, long-term growth drivers remain in place coupled low per capita consumption of milk at 97 litres per year compared to more than 200 litres per year in developed countries. The new generation of consumers in India or 'the millennials' have higher spending power and are more health conscious. About 30% of the Indian population is vegetarian and dairy products are one of the main sources of protein in their diet. The increasing consumer preference towards western food, which uses modern age VADP's like cheese, butter etc. are also expected to support demand for dairy products.
- With an increasing urban population and demanding lifestyles, consumers prefer clean, hygienic, branded, and trusted products that support growth of the organised segment. This will lead to higher growth for the organised segment compared to the unorganised segment.
- Overall ICRA expects the volume consumption of milk to grow at 4-5% over FY2020-2023.

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Milk prices: Gross margins to expand in FY2021, led by lower procurement prices amidst Covid-19 while retail prices remain elevated

- The organised dairy sector margins remain volatile to volatility in milk prices as higher raw material prices without the corresponding increase in realisations, will adversely impact margins and vice versa.
- The milk procurement price dropped to Rs. 23.8 in Q1 FY2021 (from Rs. 33.4 in Q4 FY2021) led by higher milk availability post lockdown due to lower consumption demand, fewer dairy processing companies operating during Q1 FY2021 and the perishable nature of milk. The availability of raw milk also increased in March and April 2020 due to the late onset of the flush season in FY2020 and the ample availability of cattle fodder. The milk procurement prices corrected slightly in Q2 FY2021 to ~Rs. 24/litre and is expected to remain in the range of Rs. 22-25 due to ample availability of liquid milk owing to muted demand and the onset of the flush season from October 2020. However, cooperatives may pay higher milk prices owing to their nature of constitution of benefitting the milk producers who are also members/shareholders of such cooperatives.
- Ideally lower procurement prices should lead to retail price reduction, however, milk prices had marginally increased prior to Covid-19. Generally, the retail milk prices are set by large co-operative dairy companies which set the tone for the entire market. A higher spread allowed dairy companies to compensate for reduced demand volumes for other products and higher logistics costs faced during the lockdown period. The average retail prices, which stood at Rs. 47.1 in Q4 FY2020 increased to Rs. 48.8 in Q1 FY2021, a QoQ increase of 3.6%. Milk prices have, however, moderated during Q2 FY2021 with a QoQ decline of 1.2% to Rs. 46.7 per litre.
- ICRA expects the retail milk prices in H2 FY2021 to reduce compared to H1 FY2021, owing to a reduction in procurement prices and demand resumption (higher volumes) though companies will continue to enjoy a healthy spread as ample milk supply will keep procurement prices low.

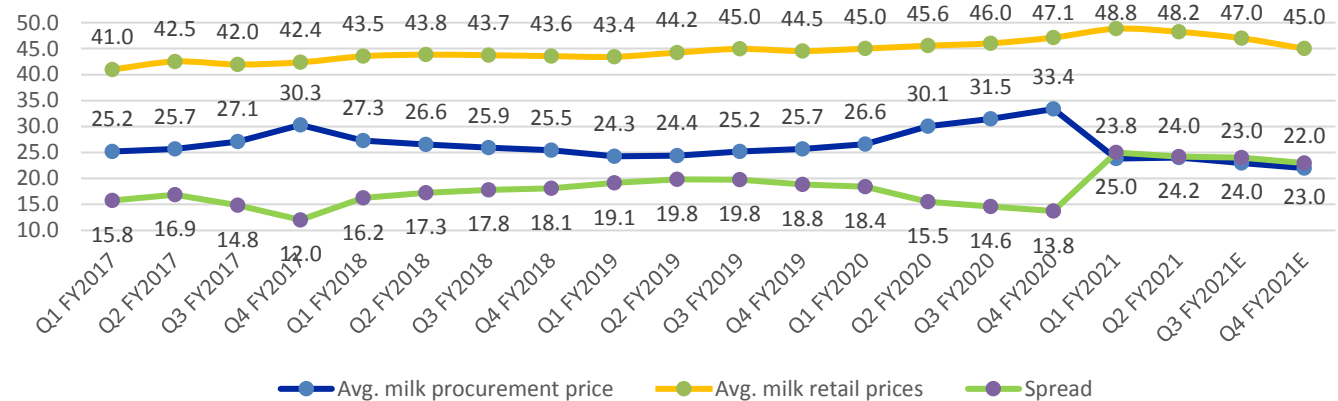
Higher SMP domestic stock, lower global SMP prices will also exert downward pressure on fresh milk procurement prices in H2 FY2021

- Due to higher milk procurement and lower sales during the Covid-19 lockdown, the organised sector resorted to large scale conversion into high shelf-life products like SMP during H1 FY2021. The effect is more pronounced for cooperative dairies which have to compulsorily acquire milk from producer members. In April 2020, the milk procurement by major cooperatives increased by 8% (560 LLPD) while demand was lower by 6% (340 LLPD) leading to a gap of over 200 LLPD.
- Generally, the SMP stock is built up during the flush season i.e. October-February and is used during the lean milk production season during April-September period. However, during the pandemic, surplus milk was available during the lean season which forced dairy companies to convert into SMP; more so for co-operative producers due to the nature of their constitution. The current stock of SMP (used for reconstitution into liquid milk by adding fat) with dairies plays a crucial role in determining the milk procurement price. Excess inventory of SMP with producers, implying higher market surplus, forces them to revise the procurement prices of milk from farmers. The current domestic SMP prices (Oct-20) are approximately Rs. 170/kg and are expected to remain in the range of Rs. 150-170/kg in H2 FY2021 on account of ample availability and lower demand. The SMP domestic prices between Rs. 150-170 per kg, when reconstituted to milk, supports the fresh milk prices at Rs. 22-25 per litre based on 3.5% fat and 8.5% SNF level.

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- Global SMP prices have also remained lower than pre-Covid levels at US\$2.47 per kg (approx. INR 180 per kg) compared to US\$2.79 (INR 205) in January 2020 with a low of US\$1.95/kg (INR 143 per kg) seen in April 2020. As Indian SMP is generally exported to the Middle-East and the African countries owing to quality variations at a discount to international prices, there is not much export benefit compared to current prevailing domestic prices of INR 170-180 per kg.
- Overall with higher SMP stock & lower global SMP prices, the same will exert downward pressure on milk prices in addition to the already ample domestic fresh milk supply during H2 FY2021. The SMP domestic prices between Rs. 150-170 per kg when reconstituted to milk supports fresh milk prices at Rs. 22-25 per litre based on 3.5% fat and 8.5% SNF level.

Exhibit 2: Milk procurement and average retail price trend



Source: Department of Consumer Affairs, ICRA research. Data based on ICRA sample companies.

Supply chain and distribution: Procurement network remains key for long-term growth of organised dairy

- **Procurement network:** Despite being one of the world’s most potential dairy markets, it remains highly fragmented. The organised sector currently accounts for only 15-16% of the total milk production in the country. Even in the organised sector all the major cooperatives and private players have a presence in specific regions and states with GCMMF being the only player to have a pan-India presence. Milk procurement remains one of the most critical requirements and difficult tasks for dairy processors as its supply is highly fragmented and regionalised. It is extremely difficult for a milk processor to procure milk from outside its core region as it takes time to build relationships with farmers and milk collection agents.

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- With procurement being regionalised and milk products being a perishable commodity with low shelf lives, the only way manufacturers can sell their products to distant locations is by having a reliable and cost-effective cold chain transport infrastructure, including village-level collection centres, bulk coolers and milk chilling centres. Companies having the largest procurement networks have the option to scale up their businesses to achieve competitive advantage. The organised sector has been expanding its procurement network by virtue of the standardisation in milk quality and testing, transparent pricing and timely payment to farmers. Further, the organised sector provides support in the form of best dairy and animal husbandry practices such as cattle feed, fodder, artificial insemination at subsidised rates.
- Among the top milk procurement players are cooperative societies such as Gujarat Cooperative Milk Marketing Federation Limited (GCMMF) with 216 lakh litres per day (LLPD) procurement, Karnataka Milk Federation at 70 LLPD, Mother Dairy at 70-80 LLPD for FY2020 as per ICRA estimates. The three leading private sector players milk procurement networks are a fraction of the leading co-operatives companies with Hatsun leading the private sector players at 27.3 LLPD, followed by Heritage at 13.8 LLPD and Parag Milk Foods at 12.0 LLPD, approximately for FY2020.

- **Distribution network:** An effective and efficient distribution network is a key requirement for the success of a dairy product manufacturer. A strong distribution network enables the manufacturer to increase its geographical presence, diversify its markets and achieve economies of scale for the VADPs. Companies use their own distribution channels like booths & retail parlours and the local area distributors. As a result of this, rising consumption of the VADP and variants of milk has also seen players expanding their B2C mix. However, there are certain VADPs like cheese, which are consumed ~50% out of home i.e. institutional sales to the HoReCa segment. Also, categories like butter, paneer and SMP are also institutional in nature. Hence, the overall B2C and B2B mix stands at 70:30, respectively for the industry.

Covid-19 has led to some disruptions in the procurement and distribution of milk products initially, though as it is being classified as essentials, the issues were sorted out subsequently. Due to problems faced such as shortage of contractual labour, closure of distribution points, difficulties in getting packaging material etc. as well as supply challenges being faced by distributors, transporters, and staff etc. the initial impact was high, though post June 2020, the issues were largely resolved.

- **Diversified Product Profile:** The right product mix of liquid milk and VADPs (Ghee, Butter, Cheese) helps companies maximise operating profitability and return ratios. While liquid milk generates lower operating margin, it generates higher RoCE on account of the low capital employed. However, growth in liquid milk is directly a function of the procurement network. Hence companies need to diversify into VADPs, which also leads to better utilisation of milk such as into butter milk, ghee, cheese and yield higher operating margins and are lesser immune to volatility in raw material prices, being value added in nature. Having a diversified product portfolio also allows companies to create brands which can fetch higher margins owing to premium pricing. Currently, among co-operatives, GCMMF (Amul) is the only player to have presence across all products while other co-operatives primarily drive revenues from milk followed by traditional VADPs such as curd, paneer, ghee and butter milk. Large private sector players derive higher share from value-added products with higher presence in emerging VADPs such as cheese, UHTs, flavoured milk, yoghurt etc.

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Organised dairy sector to report nil to -5% growth in FY2021 supported by higher liquid milk sales; margins to expand in FY2021:

- The organised segment contributes 30% of the overall market volumes and is estimated to be Rs. 3.1 trillion in FY2020. ICRA expects the organised industry to report nil to -5.0% growth, depending upon the off-take during the festival season and continued impact of the pandemic resulting in the lockdown.
- Milk contributes approximately 55-60% for the organised segment and is expected to demonstrate volume growth of 3-5% in FY2021, despite the impact of Covid-19. This is by virtue of the inelastic demand for milk, which assumes importance in private household consumption.
- Traditional value-added products like ghee, butter will see muted growth owing to lower institutional sales during the lockdown but it will get compensated to some extent by higher retail sales. Products like cheese will see a 10-15% YoY decline led by lower institutional sales during H1 FY2020 as the HoReCa segment was closed. The ice-cream segment will witness a much higher decline as 40-50% sales happened during Q1 FY2020, which was impacted the most.
- ICRA also expects the organised dairy sector revenues to grow by 8.0%-10.0% in FY2022 and 12.0-14.0% in FY2023, backed by the gradual resumption in economic activity though it remains sensitive to the course of the pandemic and milk procurement prices
- As per ICRA analysis of the leading eight private sector dairies, while revenues are likely to decline by 4.0% the operating margins will remain at 7.8% in FY2021, compared to 7.4% in FY2020. The improvement in margins will be a function of stable retail milk prices (compared to pre-Covid) while procurement prices are likely to remain low in FY2021.

Higher inventory of SMP will exert pressure on liquidity; moderation in capex plans to support coverage indicators

- The inventory levels are expected to remain higher owing to higher stocking up of SMP for fiscal FY2021. While companies will try to lower the inventory during H2 FY2020, nevertheless higher availability of fresh milk and lower demand due to pandemic will lead to higher inventory levels.
- ICRA expects the SMP inventory to be liquidated in H1 FY2022 during the lean season. The excess SMP inventory may lead to stretched liquidity position for lower rated entities and dairy cooperatives. However, additional working capital facilities with an interest subvention scheme of up to 4.0% announced in May 2020 from the Government to the co-operative sector will buttress the impact to a certain extent.
- ICRA also expects moderation in capex till the pandemic situation normalises, which will support the cash flows and debt protection indicators. Nevertheless, as per ICRA analysis of leading eight private sector dairies, TD/OPBDITA will increase from 1.9x to 2.2x while interest coverage will moderate from 5.4x to 4.9x in FY2021, though still remaining healthy.

Corrigendum

Document dated November 6, 2020 has been corrected with a revision as detailed below:

- a. Revision on Page 8, Line 9 – The “??” has been replaced with “at 70-80 LLPD”)

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