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India's Deregulated Dairy Sector Signposts the Future of Our Food

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The result of the deregulation of the dairy sector holds a mirror to what would happen if the new farm laws were to be implemented in agriculture: an easing out of the small producer, greater inequality in consumption, and co-operatives replaced by monoliths.

With every passing day, the farmer's struggle against the farm laws intensifies in defence of their livelihoods and the food security rights of all citizens. Unregulated agriculture markets facilitated by the laws, the farmers assert, will drive small and marginal farmers into penury and push them out of agriculture. The government insists that farmers will benefit with enhanced incomes from deregulated agriculture markets. In fact, a little short of a month into the farmers protest at Delhi's borders, the Prime Minister, attempting to assuage their fears, cited India's dairy sector as the success story; a sector liberalised and deregulated in 1991 at the onset of the economic reforms. Did marginal and small farmers gain or lose in dairying with deregulation? Thirty years on, it is important to revisit the dairy story.

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A key deregulation objective was to encourage inflows of private capital investment and technologies into dairying (Sharma and Gulati, 2003), and in the words of a recent report by FICCI, "promote competition in procurement and marketing of milk which would lead to increase in its value for both farmers as well as consumers." Dairy farmers were promised prosperity and better incomes with a deregulated sector, as they would be able to directly negotiate advantageous prices with multiple private dairy processors competing in the market. Deregulated markets, it was analysed, would galvanise massive growth in milk production, and thereby make milk affordable for India's poor and malnourished citizens.

Growth with inequity

Today, India is the global leader in milk production with production of 191 million tonnes of milk as of 2019-2020. This works out to a daily per capita milk availability of 407 grams, exceeding the Indian Council of Medical Research-National Institute of Nutrition's dietary recommendations of 300 grams. However, there are high levels of inequity in actual milk consumption in India. According to NIN's recent (October 2020) report 'What India Eats-2020', a mere 8.7% of rural and 14.3% of urban populations consume milk or milk products in line with the dietary recommendations. The top 5% of the wealthiest Indians consume milk and milk products that is as much as 23 times of what the bottom 5% do (NSSO 2013, Table 4.2-R and 4.2-U). The poorest Indians comprising Dalits, Adivasis, Muslims and Bahujan-OBCs show higher levels of malnourishment among their children and they also depend more on livestock than the others.

It is imperative to unpack this paradoxical and unacceptable situation of mounting volumes of milk accompanied by iniquitous consumption and understand how all of this has impacted the marginal and small farmers.



Purchasing a packet of milk | FSA-India

Up until the late 1990s, prior to deregulation of the sector, nearly 90% of milk produced was contributed by marginal and small farmers owning less than five cows or buffalos, who make up [84% of all milk producers](#). They were predominantly OBC, Dalit, minorities, and Adivasi (Staal, 2008). About half of total milk produced was and continues even today to be consumed at home (GOI 2020, 54), confirming the critical role of animal ownership for household food security. Of the remaining milk marketed, 85% was sold directly to consumers, by the producers or milk vendors (Staal 2008, 36). Policy makers over the years, have disapprovingly termed this as the ‘informal’ , ‘traditional’ or ‘unorganised’ sector.

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The ‘organised’ sector is largely of dairy cooperatives (Jesse et al, 2006) that developed between 1960-1990, via dairy commodities from the European Economic Community (EEC) and World Bank financing of large public sector investment to develop their procurement, processing, and marketing infrastructure. Popularly termed ‘Operation Flood’, the nascent cooperative sector was protected from external competition, both domestic and foreign (Sharma and Gulati 2003, 8) with (i) import restrictions on subsidized dairy products (SMP and butter fat) from the global North and (ii) restricted entry into the market of private dairy processors, brought about by mandatory licensing under the Industries (Development and Regulation) Act, 1951.

Growth after delicensing

The dairy cooperatives, structured on the ‘Anand Model’ , comprised village-level cooperatives. where members poured milk; the cooperatives coalesced into the District Dairy Unions to where milk was transported, and then processed at the District Dairy Processing Plants where it was packaged and distributed. The union, united into State Dairy Cooperative Federations, which worked in cooperation with other State Dairy Federations, towards a presumably ‘welfare’ objective, facilitated by the National Dairy Development Board (NDDB).

The co-operation across cooperatives manifested itself as a national milk grid, enabling transportation of milk across the country wherever it was required, and the maintenance of a decentralised buffer stock of skimmed milk powder (SMP) and butter fat to

stabilise liquid milk markets. In flush seasons, milk separated into butter fat and SMP, which could be reconstituted into liquid milk during the lean months. These buffer stocks were held by different dairy cooperatives and utilised as necessary, essentially to meet food security needs of urban communities. In the 1980s, Operation Flood, with its effects of commoditising milk, was critiqued (George 1986; Doornboos and Nair 1987) for its negative socio-economic impact on small farmers, who would end up selling all their milk in exchange for money.

In some states a now ‘privatised’ three-tiered cooperative structure is sustained with brands like Gujarat with its Amul, Karnataka with Nandini, and Tamil Nadu with Aavin.

In 1991, deregulation began with a [delicensing of the dairy industry](#) from the Industries (Development and Regulation) Act, 1951, and within a year there were over a 100 new private dairy processing plants in the market. By 1992, the Milk and Milk Products Order (MMPO) was promulgated under the Essential Commodities Act 1955 to bring back a semblance of regulation in the milk and milk products market, and to protect cooperatives from the mushrooming private players. Parallel amendments were made to the Multi-State Cooperatives Societies Act, 1984, and state co-operative laws to manage and run cooperatives on commercial lines. It was argued (Sharma and Gulati 2003, 11) that unless cooperatives were corporatized, they would not be able to compete in an open market environment. The message was clear: “Profit or Perish”; “Shape up or Ship Out”.

In some states a now ‘privatised’ three-tiered cooperative structure is sustained with brands like Gujarat with its Amul, Karnataka with Nandini, and Tamil Nadu with Aavin. In Maharashtra and in erstwhile Andhra Pradesh, the structure crumbled, with district unions unilaterally decoupling from their federations, and re-registering as ‘independent producer cooperatives’ under the Mutual Aided Cooperative Society (MACS) or Producer Company Acts.

Exports of milk began in the early 2000s, and by 2007 acquisitions and mergers amongst private dairies had taken place.

The Andhra Pradesh Dairy Development Cooperative Federation, for instance, challenged the re-registration of Visakha Dairy under MACS, but [lost the case](#). Visakha Dairy went on to register as the Sri Vijaya Visakha Milk Producers Company . Other member unions completely collapsed, as was the case of the Chittoor Dairy Union, one of the finest women-led district dairy unions in India. Parallel political processes like the creation of Telangana in 2014 as a new state, gave the Vijaya brand (now operated afresh by the Telangana State Dairy Development Cooperative Federation) a new lease of life. Overnight, co-operation between state cooperative federations changed to competition. There were no price controls, and every entity was empowered to set its own price.



A milk collection centre in Odisha | ILRI (CC BY-NC-SA 2.0)

In 1999 India, in order to abide with WTO rulings, abolished quantitative restrictions (QR) on SMP, resulting in the bound import tariff on SMP falling to zero. SMP imports spiked immediately, and domestic milk prices crashed, forcing many small farmers out of production. There was an uproar from farmers and dairy cooperatives alike, and in 2000 India renegotiated at the WTO, a bound tariff of 60% on all SMP. By 2002, deregulation was speeded up via MMPO amendments, to remove all restrictions on the entry of private dairies into the market and create a ‘level playing field’ without the so-called ‘domination’ by cooperatives. The MMPO continued to retain elements concerning food safety and hygiene.

Corporate cooperatives steamed ahead in securing their markets, both domestic and international, with Amul emerging as India’s top dairy.

In 2019 there were an estimated 1,944 private dairy processing plants (GOI 2020, 56), exceeding cooperatives by 70%. They included familiar names like Thirumala (1996), Dodla (1995), Hatsun (1993), Creamline/Jersey (1986) and Heritage. The latter was established in 1992, by the family of the then Chief Minister of Andhra Pradesh, Chandrababu Naidu, who brazenly used his power, to grow his private dairy, through capture of milk sales of a collapsing Chittoor Dairy Union. Andhra Pradesh pioneered deregulation under his leadership, identifying dairy as a growth engine to achieve its vision of a “Golden AP by 2020”. Naidu, was subsequently accused by his political opponents of engineering the demise of the state’s dairy cooperatives.

Exports of milk

Exports of milk began in the early 2000s, and by 2007 acquisitions and mergers amongst private dairies had taken place. By 2010, India announced 100% foreign direct investment (FDI) in food processing, including milk products. Top global dairy players entered the market, and began to operate via acquisitions, joint ventures or investments in ‘Indian dairies’ (Narayanan, 2019): France’s Groupe Lactalis, second in the top 20 Global Dairies acquired Thirumala in 2014, and France’s Danone, placed fourth globally, invested in Epigamia yoghurts in 2019. In 2019, Fonterra from New Zealand, placed sixth globally, entered a joint venture with the Future group and established Fonterra Future Dairy. One of the earliest entrants in 1996 was Schreiber Foods from the US, ranked 19th globally, which entered into a licensing agreement with Dynamix Dairy in Baramati, Maharashtra, to operate the Schreiber Dynamix Dairy. Heritage acquired Reliance Dairy in 2017, and, in 2015, Godrej bought a majority stakes in Jersey Dairy. Corporate cooperatives steamed ahead in securing their markets, both domestic and international, with Amul emerging as India’s top dairy.

The year 2015 was another watershed in the deregulated dairy markets, with a massive slump in the milk procurement prices paid to farmers. Unlike in 2000, when milk prices crashed due to SMP imports, this time the crash was a direct outcome of India’s gradual integration into global dairy trade, via rising exports of SMP, which peaked in 2014, and then collapsed due to a global price crash. As a result, Indian SMP that was outpriced on global markets and could not be sold, ended up contributing to a huge domestic build-up of stocks. By March 2018, Amul, which had become India’s largest exporter of milk powder now found itself with the largest amount of SMP stocks, totalling 1.1 lakh tonnes of a national total of 3 lakh tonnes.

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Dairy companies, both corporate and private cooperatives explored three avenues to offload these built up SMP stocks:

(i) Domestic dumping of SMP across the country as reconstituted milk, which depressed procurement prices of fresh milk, forcing farmers to literally pour milk onto the roads in protest as reported by the Food Sovereignty Alliance in their study of the Milk Crises (Food Sovereignty Alliance 2017, 50).

(ii) Despite a few dairy cooperatives from Maharashtra appealing to the NDDB to re-instate a national buffer stock of SMP, the NDDB instead recommended export subsidy support to dairies. This demand was heeded in 2018 by the centre and by the state governments of Gujarat and Maharashtra with the provision of a 20% export subsidy. SMP exports rose from 33,442 tonnes in 2015-2016, to 180,688 tonnes in 2018-19. It is ironic that India resorted to an export subsidy policy to assist its dairies, a strategy of the global North it had earlier severely critiqued. The export destinations of Indian SMP are many in our immediate neighbourhood: Bangladesh, Afghanistan, UAE, Egypt, Nepal and more.

(iii) In 2016, dairy cooperatives suddenly began to express concern for the nutrition of children, and lobbied to **incorporate milk** into mid-day meals and other government food security programmes. Up until the SMP stocks pile-up, only a few states such as Karnataka had **included** milk in their mid-day meal programmes. In 2018, the central government announced the inclusion of milk in mid-day meals across the country. However, this decision did not stem from a genuine concern for the nutrition of children, but to assist a handful of large dairies reduce their SMP stocks and improve their profit margins!

The disappearing small

Global dairy markets are as volatile as oil. Across these 30 years since India liberalised and capitalised its dairy sector, and entered the export markets, there have been three to four major global price crashes, followed by peaks. **Globally**, every crash has triggered an exodus of small and marginal family farmers out of production (Food Sovereignty Alliance 2017, 71-74). Faced with a sudden and massive fall in farm-gate prices and milk volumes purchased by the dairy companies, they are unable to cover their costs of production. This is made worse when there is an increase in feed/fodder prices, which are 70% of a farmer's production costs.

The situation in India too has been no different. Between 2000 and 2016, 5.25 million marginal farmers owning 1-2 milch cows/buffalos, were **pushed out of dairying**. Deregulated dairy markets have resulted in a structural shift at the production base of dairying. Today, the 1-2 milch animal-owning producers make up less than 45% of all dairy farmers, whereas they were in the majority pre-1990. Production has shifted away from the really marginal, to those owning a larger number of animals. Even the definition of small dairy farmer has been changed, to those owning '3-5 animals'.



Milk transportation in Chittoor district, Andhra Pradesh | FSA-India

Together marginal-small dairy farmers contribute only 60% of India's milk, down from 90% pre-deregulation. The balance 40% is from larger and larger farms—stocking 5-10, 10-50 and 100 + animals. *Dairy Global reports* how 10-50 animal owning family farms are growing, and as much as 30% each year in some regions. Trade reports project the increasing shift away from small, to medium and medium large farms (Landes 2017, 6). The 'small' can only survive by increasing their investments to expand the size of their farms, which pushes them further into debt in such volatile markets. Let us not forget that when a small farmer and a small vendor get pushed out, it means a massive loss of family nutrition and income security, which partly explains the widening inequality in milk consumption.

Consolidation

At the distribution end, the volatile markets, have translated into a consolidation down the value chain, from farm to plate. Not a single top corporate dairy player—whether cooperative or private—experienced a loss during the price slump period 2015-2019 (Food Sovereignty Alliance 2017, 74-76). In fact, like Amul, they clocked **profits**. Their profits were made by passing on the losses to the farmers. Many smaller milk vendors lost their livelihoods, and by 2018, the markets of the informal declined to just under 50% (Economic Survey 2018-19, Vol 2, Chapter 7, 187), with the expansion of organised markets comprising private and cooperative dairies. (Flagging the unorganised sector, was a clear signal by the government of its intention to fast track the formalising of the un-organised sector.)

Post the massive price crash, there are fewer but larger players, formed via mergers, acquisitions, joint ventures and expansions. So, if Lactalis **acquired** Thirumala, Anik and Prabhat Dairy Ltd in the last five years, its future plans include **enhancing investment** in India, and globally. Amul, a first time entry into Rabobank's 2020 annual listing of Global Dairy top 20 companies, having experienced a 17% compound annual growth rate in the past 10 years, has grown via expansions: increasing milk collection, expanding processing capacity, launching new products and entering new markets. While several smaller dairies folded up during the Covid lockdown of 2020, Amul sustained **profits** of over 16%. What never got sufficiently reported was how dairy farmers in Gujarat suffered **losses** at the same time.

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Amul's plans of spreading to the west, east and now **south**, with Andhra Pradesh as their hub facilitated by a **tie up** with the state government of Andhra Pradesh, is accompanied by building supply chains and dairy processing plants to augment milk processing capacity by 40-50 million litres.

It is important to flag here that merely being a 'cooperative' in domestic or global trade does not by definition mean 'equity' and 'justice'. Six of the top 20 dairy companies in the world are 'cooperatives'. They have consolidated their production base in a specific geographic region and have become formations of increasingly larger producers. These are cooperatives that in their relentless desire for profits, exploit the labour (70% of which is contributed by women), land and resources of small farmers, capture markets down the value chain to protect their 'member' interests and disrupt the livelihoods of millions of 'non-member' small dairy farmers and traders, in other geographies of their expansion. (In the case of Amul, now said to be India's **biggest FMCG company**, 84% of its milk procurement is in Gujarat.) This is a domestic replication, of global dairy **dumping patterns**.

What of the future?

What can we conclude from the experience of deregulation thus far? The deregulation of the dairy sector has resulted in squeezing out millions of 1-2 cow/buffalo owning marginal dairy farmers, along with a loss of livelihoods among countless small milk vendors and traders, smaller dairy enterprises, and destruction of the informal. It is the large agribusiness corporates—both cooperative and private—who have accumulated profits via monopolising markets.

The future promises more of the same. Exports of milk and milk products lie at the heart of the next phase of dairy development. The Atmanirbhar Bharat—Make in India dairy vision of the government of India, where India, now milk 'self-sufficient' and having exceeded its nutritional per capita milk targets, is looking to produce 330 million tonnes of milk by 2024, and **expand** its share in global dairy exports from the current 0.36% to 10%.



Buying milk from a local vendor | FSA India

The Government of India's Rs. 8,004 crore Dairy Development and Infrastructure Development Fund, which can be accessed by state federations, dairy unions, milk producer companies, multi-state cooperatives, and NDDDB subsidiaries, coupled with the Rs 15,000 crore Animal Husbandry Infrastructure Development Fund for the private sector, is set to finance the expansion of dairy procurement, processing, cold-chains supply chains, value added products and animal feed infrastructure. The objective is to integrate producers and milk markets still operating in the 'unorganised sector' into India's corporate dairy agribusiness. This will be done via aggregating farmers into Farmer Producer Organisations (FPOs), equipping them with bulk milk chilling infrastructure to store milk, and vertically linking them to integrated dairy companies be it Amul, Lactalis or any other.

Legal mechanisms such as the new farm laws, which include animals, animal products and animal feed, will fast-track corporate control and monopoly over the dairy supply chains, both domestic and amongst our immediate neighbours. Amul is confident of becoming a major dairy exporter to India's neighbours, Pakistan, Sri Lanka, Bangladesh etc which India claims are 'milk deficit'. This will be achieved through enhanced milk production and milk yields per animal, rearing higher yielding cross-bred cows and buffaloes, with their increased demand for feed concentrates and other technological interventions.

Increased capitalisation of dairy markets, coupled with deeper integration into global trade and exports, as we have seen from our recent past, spells further disaster for the small producer in India (and our neighbours), aggravates food injustice, and threatens to be an ecological time-bomb. As citizens and food consumers of this country, the experience of dairying should alert us to the future that awaits us, unless we expand the movement led by farmers to repeal the farm laws.

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