DAIRY PULSE

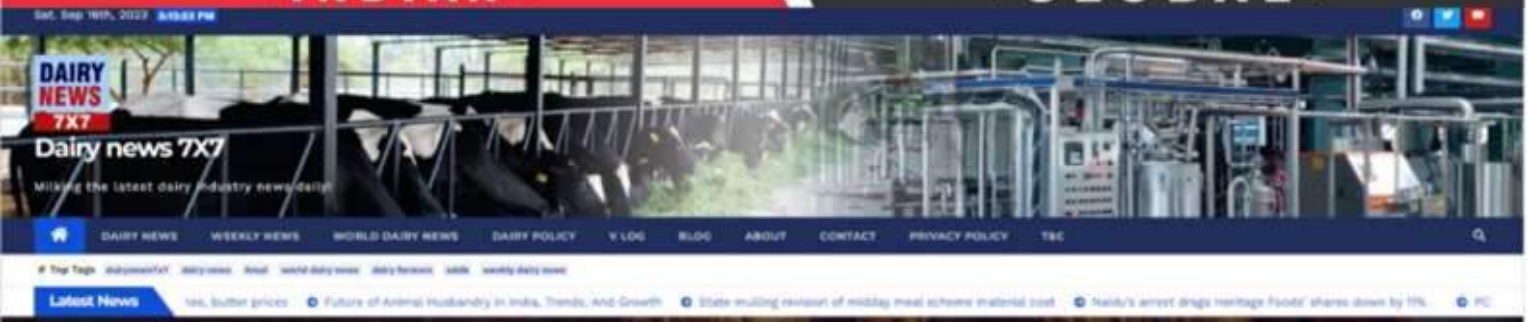
Estd. 1990

Suruchi Consultants

Delivering solutions with integrity

KNOWLEDGE PARTNER

INDIAN *GLOBAL*



FORTNIGHTLY NEWSLETTER

Dairy Pulse 190th Edition (16th to 30th, September 2023)

CATEGORIES OF THE EDITION

- Suruchi Endeavor in Skill/ Entrepreneur Development Domain
- Indian News
  - Animal Health/Protection
  - Marketing
  - Health/Awareness
  - Regulatory/Legal
  - Survey/Report
- Foreign News

ENHANCE BRAND AWARENESS !

AMONGST DAIRY FRATERNITY

Scan to subscribe

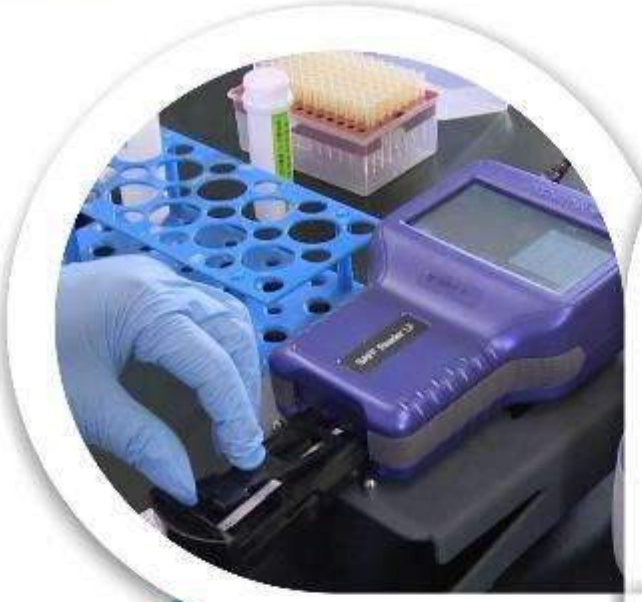
ADVERTISE IN OUR

- News Website **DAIRYNEWS7X7**
- Weekly News **DAIRYNEWS7X7**
- Fortnightly Newsletter **DAIRY PULSE**

CONTACT

+91-78274 05029, 0120-4320845 / editior@dairynews7x7.com

www.safemilklabs.com



safe labs

SAFE LABS

NABL ACCREDITED TESTING LAB FOR MILK & MILK PRODUCTS

TESTING SERVICES

A. Satatutory
B. Adulterants
C. Contaminants
D. Microbial

NEW PRODUCT DEVELOPMENT

A. Health & Nutrition
B. Indulgence
C. Convenience

CONSUMER INSIGHTS

A. Focus GroupDiscussions
B. Organoleptic Evaluation
C. Competitor Benchmarking

Safe Labs conducts testing of Milk & Milk Products as per FSSAI & IS requirements in the field of Chemical, Microbial & Contaminants.

Add. : C-49, Sector-65, Noida, U.P.(201307),
E-mail : info@safemilklabs.com, Contact : 0120-4370845
Url.: www.safemilklabs.com

NABL Accreditaion:

ISO-17025:2017

WORLD FOOD INDIA 2023 3rd to 5th November Processing for Prosperity

G20 भारत 2023 INDIA

Azadi Ka Amrit Mahotsav

SURUCHI DAIRY ADVISORS

Since 1990

INVITE YOU TO VISIT

WORLD FOOD INDIA 2023

Processing for prosperity

A Global event to showcase, connect & Collaborate

3 - 5 November 2023

Pragati Maidan, Delhi India,
Hall No. 2, Stall no - 75G

Dairy Pulse 190th Edition
(16th to 30th Sep. 2023)

Content

Indian News

Unlocking India's Dairy Export Potential: Challenges and Focus

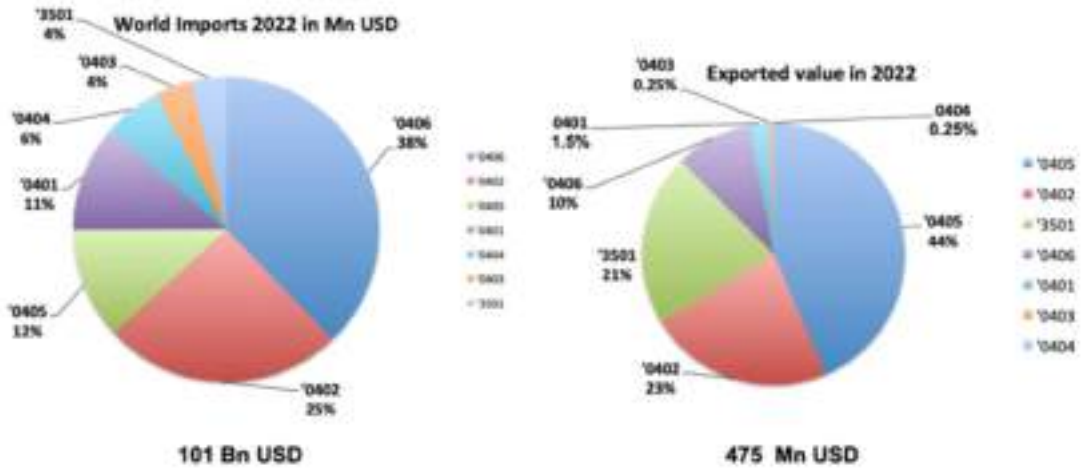
https://dairynews7x7.com/unlocking-indias-dairy-export-potential-challenges-and-focus/

I had the privilege of attending the annual alumni meet at NDRI Karnal on September 30th, a nostalgic event where we reunite with our seniors, juniors, and, most importantly, our classmates. During this gathering, I had the honor of delivering a presentation on the state of dairy exports in India, in the presence of esteemed industry experts, chaired by Dr. R. S. Sodhi, which was truly inspirational.

In this article, I aim to shed light on the challenges and focus areas of Indian dairy exports in the global market. It's crucial to recognize that the world views India primarily as a market with 1.4 billion consumers, rather than a dairy exporter. Asia currently leads in dairy product imports, with India and Pakistan contributing significantly to the milk production in this region. As my co-speaker and classmate, Vipan Kakkar from Olam, aptly noted, Asia produces 47% of the world's milk but exports only 4%, while Oceania, despite producing just 4% of the global milk, accounts for nearly 30% of the exports.

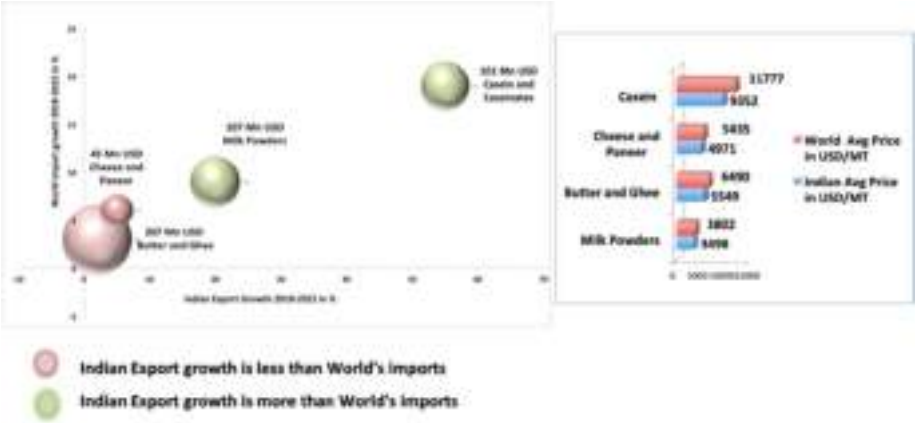
As per Kakkar, India possesses two substantial advantages on the global stage. Firstly, it boasts a significant buffalo milk species population, a key source of A2 milk. Secondly, its strategic proximity to SAARC and GCC countries positions it favorably for dairy product exports.

Comparison of Indian dairy exports with World's dairy imports



Analyzing Indian dairy exports in comparison to the world's dairy imports reveals a stark contrast. India's total dairy exports, valued at 475 million USD, pale in comparison to the world's dairy import figure of 101 billion USD. Key export categories from India include Milk Powders (0402), Butter and Ghee (0405), Cheese and Paneer (0406), and Casein (3501). Notably, Milk (0401), Fermented milk products (0403), and whey products (0404) make up just a negligible share of around 2-3%.

Performance of Key dairy exports from India in the world markets



Indian dairy exports exhibit varying performance across categories. India outpaces the world's export growth rate in Milk Powders and Casein but lags behind in Butter and Cheese, with prices often falling below global averages.

Importing country profiles for key product categories in Indian exports -2022

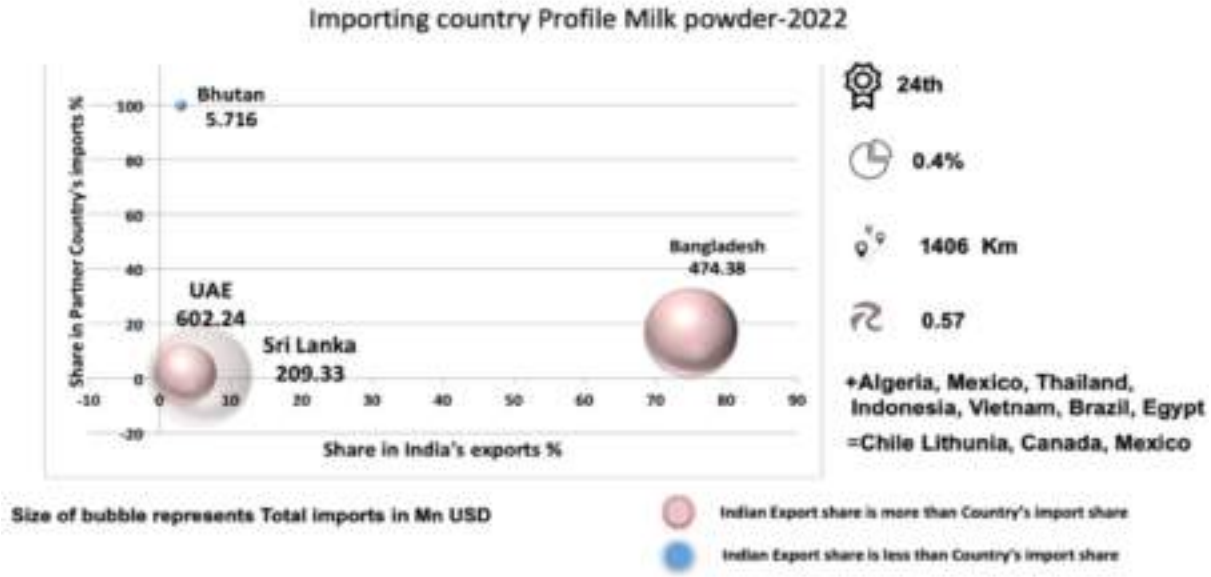
To gain further insights, I examined country profiles for key product categories in Indian exports in 2022. This analysis considered India's share in partner countries' imports versus its share in Indian dairy exports.

Indian dairy exports in each categories were also ranked for the global rank, % share in world market, average distance covered in exporting and concentration of exports.

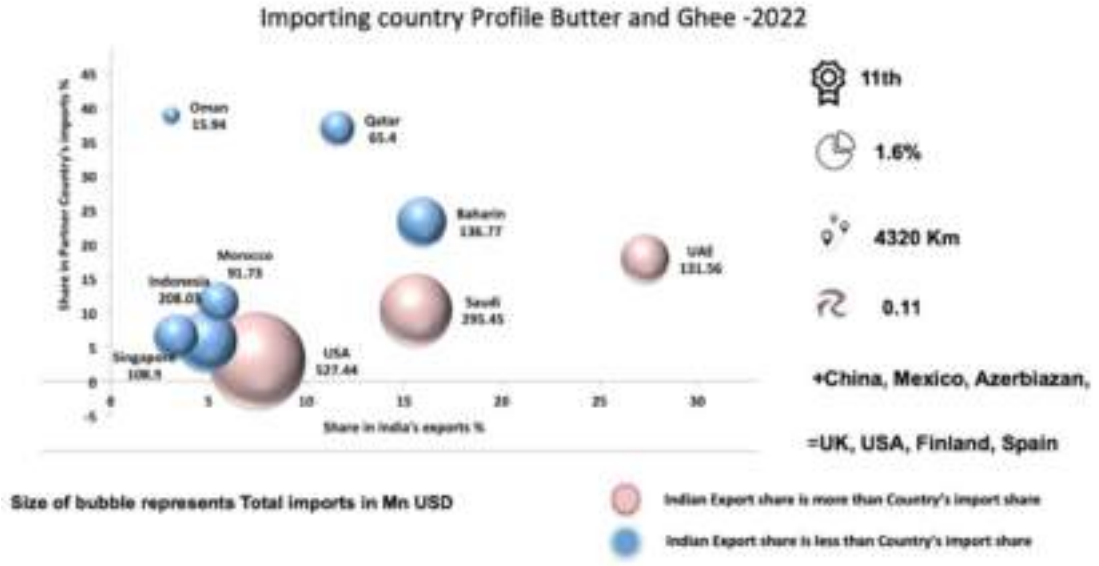
Concentration of exports emerged as a critical factor, with Butter being the most concentrated category due to a significant portion going to Bangladesh. Concentration of exports tells us about the dispersion of exports and a factor of above 0.18 is considered as concentrated. Higher concentration

levels bear the risk of putting your eggs in very few baskets. Interestingly, Bangladesh's total powder imports is more than the total dairy exports from India in all dairy categories. For effective expansion, we must consider countries with similar exports ("=") and those with untapped potential ("+"), while also ensuring market access requirements are met.

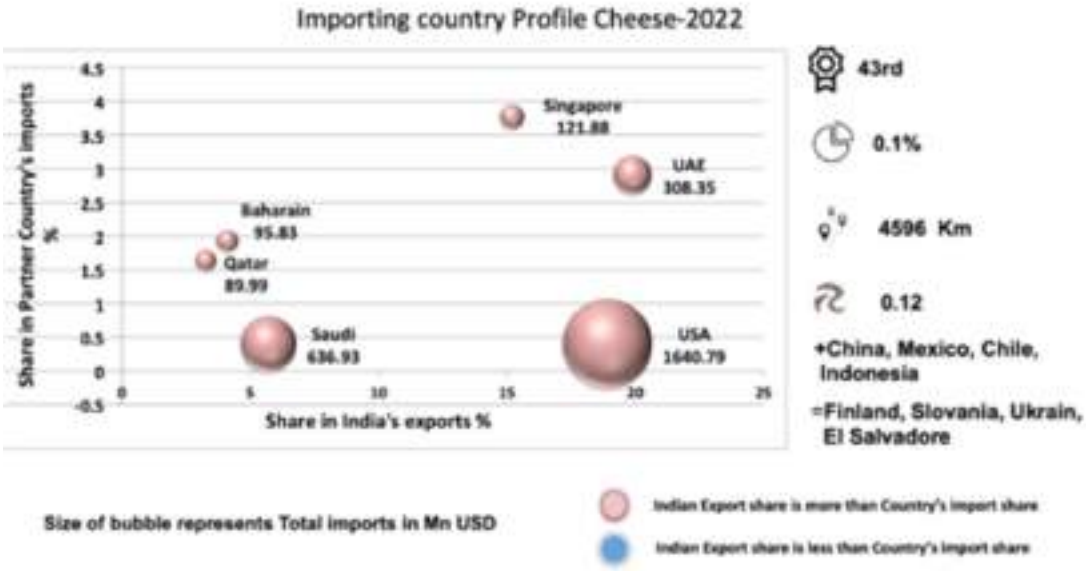
Milk Powders 0402



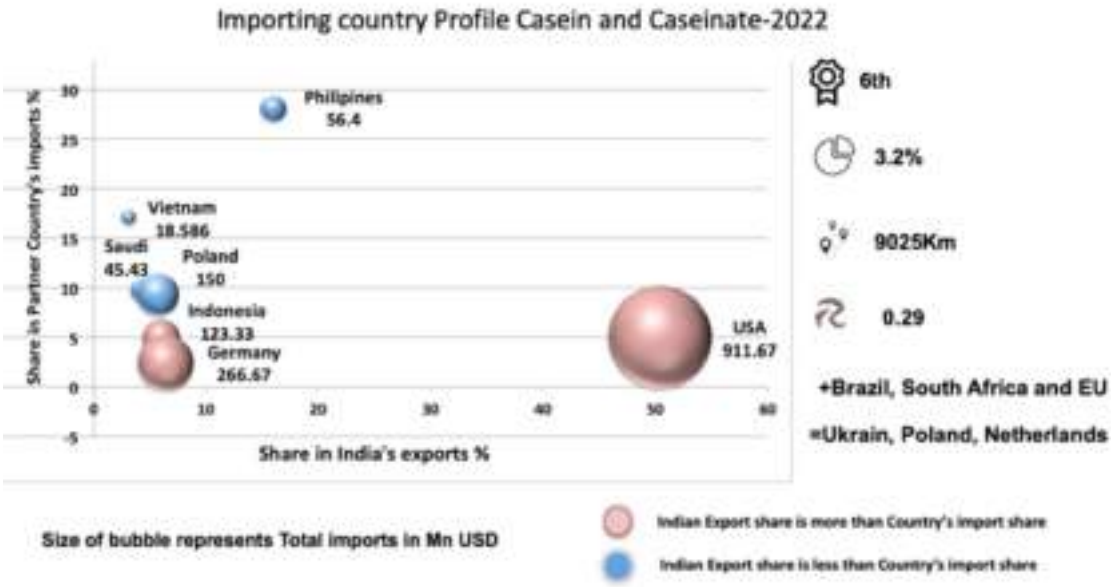
Butter and Ghee 0405



Cheese and Paneer 0406



Casein and Caseinates 3501



Challenges

Addressing the challenges for boosting dairy exports in India requires a multi-pronged approach:

A. Quality: Ensuring food safety and hygiene throughout the milk value chain is paramount. Primary production in agriculture and allied sectors must also adhere to food safety standards, and traceability is essential for global markets.

B. Scale: To compete globally, investments in infrastructure for large-scale dairy product production are essential. Expanding schemes like PLI to encompass a wider range of dairy products, especially those with high growth potential like whey, is recommended.

C. R&D and Innovation: Developing products tailored to global consumer preferences is vital. Understanding customer needs is crucial to create innovative dairy products that meet global demand.

D. Subsidies: Subsidies must be strategically allocated to address impediments rather than indiscriminately subsidizing all aspects of dairy production.

E. WTO: A balanced approach to WTO negotiations is necessary to open up markets for Indian dairy products.

India's dairy exports have reached 132 nations from 2018-2022, showcasing a commendable global reach. While challenges exist, opportunities abound, particularly in whey processing for value-added products. It is imperative for policymakers to support the growth of whey processing infrastructure.

Focus

In conclusion, the key to successful dairy exports lies in aligning our products with global consumer needs. As Seth Godin wisely said, "Don't find consumers for your products, find products for your consumers." It has been a pleasure to share these insights with my NDRI fraternity through NGA, and I am grateful for this opportunity to contribute to this crucial discourse.

HAMUL building mega dairy, operations to begin in January

SEP 29, 2023

https://dairynews7x7.com/hamul-building-mega-dairy-operations-to-begin-in-january/

The Hassan Cooperative Milk Producers' Society Union Ltd (HAMUL) is constructing a mega dairy similar to AMUL at Hassan Growth Centre, and will begin operations in January 2024.

The second largest unit in the dairy sector, being set up at a cost of Rs 560 crore, has machinery with the latest technology imported from Germany and Italy. The machines are fully automatic and manpower will be under 30 per cent.

The mega dairy, on a sprawling 50 acres, aims at increasing milk procurement and processing of 25 lakh litres by 2030, from the current procurement of 12 lakh litres per day. The new dairy also has a training centre for milk producers, a powder plant, UHT and processing units. The technical team of engineers from Germany and Italy will start installing the machinery.

According to HAMUL chairman HD Revanna, milk production is increasing and the society is giving a procurement price of Rs 39.20 per litre, the highest among the 13 milk unions in the state. HAMUL also came up with new schemes in the interest of milk producers. The 9.40 lakh cattle were vaccinated for foot and mouth disease and will start a month-long special vaccination drive. HAMUL is also giving mat and jab cutters to milk producers at a 50 per cent subsidy.

Dairy farmers urge CM Stalin to enhance subsidy for cattle feed

SEP 28, 2023

https://dairynews7x7.com/dairy-farmers-urge-cm-stalin-to-enhance-subsidy-for-cattle-feed/

Dairy farmers, who have been seeking a hike in procurement prices, have urged Chief Minister M.K. Stalin to announce an increase in subsidy for concentrate cattle feed.

"Since most of the cows in the State are cross-bred with jersey cattle, they need this feed and farmers are unable to buy it as it is costly. This leads to the quantity of fat and solids non-fat (SNF) reducing in the milk. If the correct quantity of feed is given to the cows, they will be able to increase milk production and the milk will have the requisite quantum of fat and SNF," said M.G. Rajendran, general secretary, Tamil Nadu Milk Producers' Welfare Association. "If we get an audience with the Chief Minister, I am sure he will understand our problems and provide fully subsidised feed," he added.

In their most recent petition to the government, dairy farmers said they were incurring a loss of about ₹15 per litre. "We want ₹55 per

litre for cow milk and ₹68 per litre for buffalo milk. At present, we are being paid only ₹35 per litre of cow milk and ₹44 per litre of buffalo milk. Many farmers have shifted to private dairies as they pay anywhere between ₹8 to ₹10 per litre additionally," said A.M. Selvaraj, a farmer from Salem district.

A milk industry expert said that over the last two years, many dairy farmers had moved to the private sector. "This led to Aavin getting only around 30 lakh litres of milk a day, which is hardly enough. Unless Aavin increases its procurement price, more farmers will move to the private sector and this will affect the cooperative milk system in the State…The government can step in and provide subsidy for the feed or ₹10 more per litre," he said.

Minister for Dairy Development Mano Thangaraj on Tuesday said there was no move to increase Aavin milk prices. In the last three months, 295 new primary milk cooperative societies had been started. The sale of milk-based products had increased, compared with last year, he said.

Amul expects no price hike after timely monsoon in Gujarat

SEP 28, 2023
https://dairynews7x7.com/amul-expects-no-price-hike-after-timely-monsoon-in-gujarat-says-chief-jayen-s-mehta/

Amul does not anticipate any price hike as the situation is "pretty" good this year after timely monsoon rains in Gujarat and flush milk procurement season is starting, GCMMF Managing Director Jayen S Mehta said on Wednesday.

The Gujarat Cooperative Milk Marketing Federation (GCMMF) sells its dairy products under the popular Amul brand."The situation is pretty good this year because of timely monsoon in Gujarat at least which means the pressure on producers for the feed and fodder cost is not high, and we are entering the flush season of milk procurement, so we are not anticipating any hike," Mehta told PTI.

He said this while replying to a question about whether there would be any kind of price rise in the coming months.On the investment plans, he said that they are investing close to Rs 3,000 crore every year and that is going to be there for the next several years.

"With increase in milk procurement and processing facilities also need expansion, we will

be announcing a new dairy plant at Rajkot, with a capacity of more than 20 lakh litres per day, and a new packaging and processing units also there," Mehta said.

He added that they would invest at least Rs 2,000 crore in the Rajkot project while several other projects are also underway.When asked about certain trading partners like the European Union (EU) demanding import duty concessions in the sector under free trade agreements (FTAs), Mehta said that milk is a source of livelihood for more than 10 crore families in the country and most of the producers are small and marginal farmers.

"If the developed countries want to dump their surpluses into our country, it becomes a problem for our farmers and that's what Amul has represented several times to the government," he said adding the government also understood this the core issue and that is why the dairy sector has been kept out in all FTAs."India allows import of dairy goods like European cheese at a marginal 30 per cent duty – Those countries do not reciprocate this. It is difficult to export dairy products to EU – The US has duties from 60-100 per cent.

"India is an open market but here we don't want their surpluses to come at a cheaper rate and harm the livelihood of our small farmers," he said.

Strengthening animal husbandry will boost economy-Siddaramaiah

SEP 27, 2023
https://dairynews7x7.com/strengthening-animal-husbandry-will-boost-economy-says-siddaramaiah/

Chief Minister Siddaramaiah on Tuesday said that strengthening animal husbandry and increasing cattle wealth will shore up the economy and add to the State's GDP growth.

He was speaking after inaugurating a slew of programmes of the Department of Animal Husbandry and Veterinary Services at Uttanahalli on the outskirts of the city.

This included a training programme for Accredited Agents for Health and Extension of Livestock Production (A-HELP) which is a Central government initiative for extending cattle and livestock care in rural areas through the agents known as Pashu Sakhi. He also launched the 4th round of State-wide vaccination drive for cattle against foot-and-mouth disease and inaugurated a veterinary unit at Uttanahalli in Varuna constituency.

Mr. Siddaramaiah said that it was the duty of the department to ensure genetic improvement of the local livestock breed so that the yield is more and farmers find it profitable. Referring to dairy as an economic activity, Mr. Siddaramaiah said though the State was the second highest milk producer in the country after Gujarat there was scope for additional production and procurement by the Karnataka Milk Federation.

Referring to outbreak of diseases like foot and mouth or lumpy skin, the Chief Minister pointed out that it leads to decline in milk yield and said that it was imperative to inoculate or vaccinate the cattle.

Mr. Siddaramaiah said farmers should take up diary farming as a secondary economic activity. "When milk production reached a glut during my first tenure as the CM, I launched Ksheera

Bhagya for schoolchildren besides increasing the incentives to dairy farmers," he said.

Referring to Pashu Sakhi, he said the objective was to strengthen and implement the various schemes of the government and act as a bridge between the farmers and the authorities. It is akin to ASHA workers in the health sector, said Mr. Siddaramaiah. While agriculture is the primary occupation of the farmers, dairy farming can be the secondary occupation and shore up their income. If the dairy farming is strengthened it will augment farmers income, boost the economy and add to the State's GDP growth, Mr. Siddaramaiah said.

The Chief Minister recalled that he had held the portfolio of the Minister of Animal Husbandry in 1985 and was responsible for bringing the KMF and other dairies to function under the milk farmers cooperatives so as to strengthen the movement.

Minister for Animal Husbandry K. Venkatesh said the State has recruited 5,942 women as Pashu Sakhis and they will undergo a 20-day training programme on the kind of intervention they can undertake in providing care for livestock. He said Karnataka was also the first State in the country to take up the 4th round of vaccination against FMD in cattle. He said 290 mobile veterinary units are functioning in the State to extend veterinary care to rural areas and there was demand for more such units.

The Minister also referred to paucity of staff in the department and said that against the sanctioned strength of 18,000 there was a 50% vacancy.

Elected representatives from the region, senior officials of the Animal Husbandry department, Deputy Commissioner K.V. Rajendra and other officials from the district administration and the Mysuru Zilla Panchayat were present.

Karimnagar dairy turnover crosses Rs 439.51 crore

SEP 26, 2023

https://dairynews7x7.com/karimnagar-dairy-turnover-crosses-rs-439-51-crore/

The Karimnagar Dairy turnover has crossed Rs 439.51 crore during the financial year 2022-23, which is a Rs.20.66 crore jump from last year's revenue of Rs.418.85 crore.

The 12th general body meeting of Karimnagar

Dairy was conducted at its new project at Nallagonda village of Thimmapur mandal on Monday.

Presenting the annual report at the general body meeting, dairy chairman Ch Rajeshwar Rao informed that the milk procurement had increased from 430.85 lakh litres in the year 2021-22 to 474.85 lakh litres in the year 2022-23. This financial year till July, they were procuring 1.53 lakh litres daily.

As part of expansion of the dairy through JICA (Japan international cooperation agency) project under the National Dairy Development Board (NDDCB), he said they would open a new fodder factory in Pollampalli village, fully automated curd unit at Mega dairy project in Nallagonda and mineral mixture plant as part of JICA project.

To reduce the power bill, the dairy had decided to go in complete solar power generation at its main plant in Padmanagar in Karimnagar town and Mega dairy project in Nallagonda.

A dairy disruption is brewing in Indian startups at Phyx44 labs

SEP 26, 2023

https://dairynews7x7.com/a-dairy-disruption-is-brewing-in-indian-startups-making-protein-without-animal-cruelty/

In the pristine labs at Phyx44 in Bengaluru, a shiny hundred-litre fermenter tank pours out gallons of milk. The creamy white frothy liquid is chemically identical to the milk we get

from cows and buffaloes, but its origins are very different. No animal was touched to produce this milk. It's the result of 'smart proteins'.

A genetic code that tells the cow's body how to produce milk was introduced inside microbes, which then churned out the proteins that are essential components of milk.

Around 200 km away in the neighbouring city of Mysuru, another startup, Mycovation, is trying to create proteins found in fungi, which can then be added to plant-based meats to improve their taste and texture. Their team uses filamentous fibres of fungi for this purpose.

Startups like Phyx44 and Mycovation are poised to capitalise on food trends in a world bogged down by climate change, where the cruelty-free tag is displayed like a medal, and veganism has stormed mainstream culture. They are part of a larger global movement in the alternative protein industry called precision fermentation. The idea is to get as close to the taste of the 'real thing' as possible – without harming or depending on animals in the process.

"We are trying to get milk and milk products that are identical to what you get from the cow but without using animals," Phyxx44 founder Bharath Bakaraju said.

Most of the startups are a long way off from mass production, but the technology holds the seed of a promise—a world without industrialised rearing of cattle, with reduced greenhouse emissions from agricultural and animal rearing practices, and one that is less vulnerable to the vagaries of climate change. But it has the potential to disrupt the dairy industry, already there is pushback. And first, Phyx44 and other startups have to convince vegans that the product is truly cruelty-free.

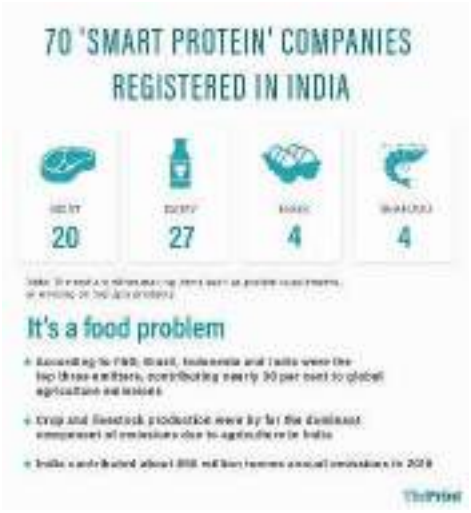
Ever since Dutch professor and pharmacologist Mark Post unveiled the world's first hamburger made from lab-grown beef that costed more than $ 300,000 ten years ago, there's been a growing interest in cellular agriculture. Cells are being engineered to generate proteins. A startup in the US used cells to produce lactose and casein found in breast milk. Another startup, also in the US, is using the process to develop animal-free eggs.

At the centre of this movement in India toward alternative proteins is the Good Food Institute (GFI) India, a wing of international nonprofit think tank GFI that works towards accelerating research, policy, and business in this space.

In India, GFI is engaging with government, scientists, and startups to identify research problems, encourage sustainability in food production, and advocate 'smart' proteins. But it steers clear of actively advocating veganism. Instead, the technologies involved are marketed as a green, alternate source of food in the backdrop of climate crisis and food insecurity.

"There is not enough land, feedstock, water and labour available to produce animal-based products in a sustainable manner. So we need to rethink how we produce our food, and this

is an attempt to look at how the future of foods looks," Bakaraju said.



From sci-fi to real life

Growing up, Bakaraju loved curd, ghee and paneer, but as an adult vegan, he was unhappy with the alternatives in the market. Phyxx44 is the perfect testing ground for cruelty-free products that don't compromise on taste.

The team has created strains of microbes to produce casein and whey proteins. This has been scaled to a hundred-litre fermenter tank, and the team is in the process of scaling up to 1,000 litre.

"Our endeavour right now is to be able to scale up the product to be able to do consumer surveys," Bakaraju said.

Precision fermentation is relatively a new name for a fairly mature technology called recombinant protein production, which has been around for nearly two decades, Bakaraju said. It's used in the production of vaccines, molecules for biopharmaceuticals and antibody therapies. But using recombinant protein technology to create proteins that are identical to what we get from animals is relatively new.

"Milk is basically a concoction of lactose, proteins, fats, sugars and water. If you look at the protein in milk – there are two very important components: casein and whey," said Bakaraju.

"We want to test our product out for consumers in different forms – whether it is liquid milk, yoghurt, or any other consumer products that can be made and consumed," he added.

But so far, only one company, Perfect Day, has received approval from India's food safety regulator (FSSAI) to manufacture animal-free milk protein using the precision fermentation technology. Headquartered in the United States of America, the precision fermentation company received approval for its product in 2020 from the USFDA. In November last year, it acquired Gujarat-based Sterling Biotech to expand its presence in India. The company plans to invest Rs 957 crore to scale up production and export of animal-free milk proteins from India.

The technology has the potential to reduce dependence on livestock, which produces 14.5 per cent of the world's greenhouse gas emissions. And India has the potential to become a manufacturing and consumer hub.

The India vegan food market size reached $1,324 million $1.32 billion in 2022, according to a report by The International Market Analysis Research and Consulting (IMARC). It predicts that this will grow to touch $ 2,463 million $2.47 billion by 2028.

Smart proteins as a research priority

In August, Prime Minister Narendra Modi's Science, Technology, and Innovation Advisory Council (PM-STIAC), chaired by Prof. Ajay Kumar Sood, principal scientific Adviser to the government of India introduced the country's policy priorities for high-performance biomanufacturing. Smart proteins was one of them.

According to GFI, the Indian government has begun to recognise this potential and is actively engaging with stakeholders to boost the infrastructure for manufacturing smart proteins.

GFI India is now part of a sectoral committee on smart protein working towards a national policy on biomanufacturing. On the ground,

GFI is working with research labs to help develop technologies.

“What a person chooses to eat is personal. There are also a number of socio-economic factors behind such choices. Our goal is rather to look at food sustainability in the long run,” said Mansi Virmani of GFI India.

It also offers technical advisory to the startups and companies who are involved in such products. “These include end-product manufacturers, ingredient suppliers, as well as equipment manufacturers,” said Padma Ishwarya, a science and technology specialist at GFI India.

In this, GFI’s goals align with Bakaraju and others who are desperate to address food insecurity, limited resources and a growing population. And the future could well be lab grown meat.

Challenges in fermented meat

It begins with broth. Meat protein cannot be fermented like milk because its structure is more complex. Instead, stem cells from a fertilised egg or tissue from a living animal are tested for resilience and their ability to divide, and then frozen. When it’s time to make the meat, they are mixed in a broth of nutrients that are required for the cell to grow and divide.

“But that broth needs certain particular protein ingredients, which comes from precision fermentation,” said Chandana Tekkatte, science & technology Specialist at GFI. That is the crucial link between fermentation and making meat.

Growing meat using the fermentation process is very challenging. Unlike milk and egg – which are largely composed of one or two kinds of proteins – meat has a diverse range of proteins –Venkatesh V Kareenhalli, a professor at IIT-Bombay

“After a few weeks, the cells begin to adhere to one another and produce enough protein to harvest. Finally, the scientists texturize the meat by mixing, heating or shearing it and press it into nugget or cutlet shape,” said Joanna Thomson in an article in the Scientific American.

India is still a long way off from manufacturing lab-engineered meat for consumption, but research has been underway for several years now. In 2019, the Department of Biotechnology (DBT) allocated Rs 4.5 crore for India’s first government-funded project on cell-based or clean meat. The Centre for Cellular and Molecular Biology (CCMB) in Hyderabad partnered with the National Research Centre on Meat for the project.

Venkatesh V Kareenhalli, a professor at IIT-Bombay, is trying to take a different approach to producing proteins for human consumption that can mimic meat. He has identified algae that typically grows in north eastern states to produce proteins.

“Growing meat using the fermentation process is very challenging. Unlike milk and egg – which are largely composed of one or two kinds of proteins – meat has a diverse range of proteins,”

–Venkatesh V Kareenhalli, a professor at IIT-Bombay

The texture and mouthfeel of animal meat comes from the muscle cells – which need a different process to grow. “While labs around the world are trying to culture cells in the lab to ‘grow’ meat – this is proving to be unviable and expensive,” he said. Moreover, with current technological knowledge – there is no substitute for blood serum obtained from animals. So, cultured meat cannot be ‘vegan’, he argues.

His team has managed to tweak the alga to produce up to 1 kilogramme of proteins per day. At present, this product can be used as animal feed, but the team is working to make it fit for human consumption.

"The process also uses carbon dioxide – and right now the world is looking for carbon remediation," he added. This makes the proteins sustainable.

Kareenhalli has also developed oyster mushrooms to produce proteins that are closer to animal meat.

"Eventually, we will see if we can somehow blend the two to get the right product that tastes and feels like meat," he added.

Catering to a vegan market is not the ultimate goal – what he wants to achieve is a new generation of 'functional foods', that have high nutritional or medicinal value.

"We can make a food that diabetics can consume or for cancer patients who require immunity and proteins for recovery after their therapy," he said.

In the private sector, startups like FermBox, a synthetic biology company, uses precision fermentation technology with particular emphasis on animal-free fat ingredients for food applications. This includes fermentation-derived animal and dairy fats, lipids, colouring agents, flavour molecules. The FermBox facility is currently only 40,000 litres and will be scaled up further.

Changing mindsets and labels

The puritanical and the pedantic can argue that lab-cultivated meat and milk is not truly vegan, but the end-result is cruelty-free. And dairy-loving Indians are slowly embracing the vegan life from ethical leather to oat milk and almond butter.

Vegan is the flavour of the season. GFI considers 2021 to be a banner year for investments, with $5.1 billion poured into the category. From 2019 to 2021, over 400 products and 60 brands are working on plant-based meat, eggs, and dairy with many of them launching on shoe-string budgets. At the same time, FMCG titans like Tata Consumer Products and ITC, as well as D2C (direct to consumers) unicorn Licious have also launched their own line of plant-based meats, thereby demonstrating an early proof-of-concept for the sector in India.

Lab-grown meat and milk can upend this sector, but it's still very early days. More people are becoming aware that a stomach ache after consuming milk and related products is a sign of lactose intolerance

"When we started off, the plant-based industry was known as the alternative industry. If you think about it, alternative is something that is a second choice," said Sweta Khandelwal, one of founders of BetterBets (previously Alt-Foods), which sells plant-based chocolate, vanilla,mango and other flavoured drinks.

Instead of working largely with imported crops, the Noida-based startup decided to go 'desi'.

"We launched our product made from sprouted sorghum, ragi and oats. It is a one-of-its-kind blend and the first in the entire world to make millet milk," said Khandewal.

It took hundreds of trials to achieve the right blend, but eventually they got there. Now, BetterBets is a supplier to some major chains in India, including Blue Tokai and Roasteries.

"For Indians, taste matters. If chai does not taste like chai then there is no point having that tea," said Khandelwal.

However, the market's mindset has shifted drastically, she added, largely due to pandemic, which made people think about health and what they consume.

"People also had the time to focus on their lifestyle and implement changes during the pandemic," she added.

But none of these alternative products can be called 'milk'. In 2021, the FSSAI issued an advisory, prohibiting the use of words like 'milk' or 'dairy' to classify plant-based beverages, with the exception of certain products like coconut milk and peanut butter. The advisory was in re-

sponse to a complaint by the National Co-operative Dairy Federation of India (NCDFI), which objected to the classification of plant-based milk products as dairy.

The "strong milk lobby" has been one of the biggest hurdles to the plant-based dairy industry in India, according to Virmani. NCDFI had called private companies labelling plant-based beverages as milk to be 'illegal'. Most dairy co-operatives in India — including Amul and Safal — are members of NCDFI.

"We have to adapt to regulatory changes. We have to educate our customers. For us the main problem was that when someone hears millet milk they understand what it is, but if we call it a drink – they might think it's a juice or something," said Khandelwal.

Marketing using the correct labels matters to BetterBets because millets have traditionally not been thought of as tasty ingredients in India.

While plant-based products still have a clear regulatory framework, the road is somewhat foggy for fermented foods like lab grown meat and milk.

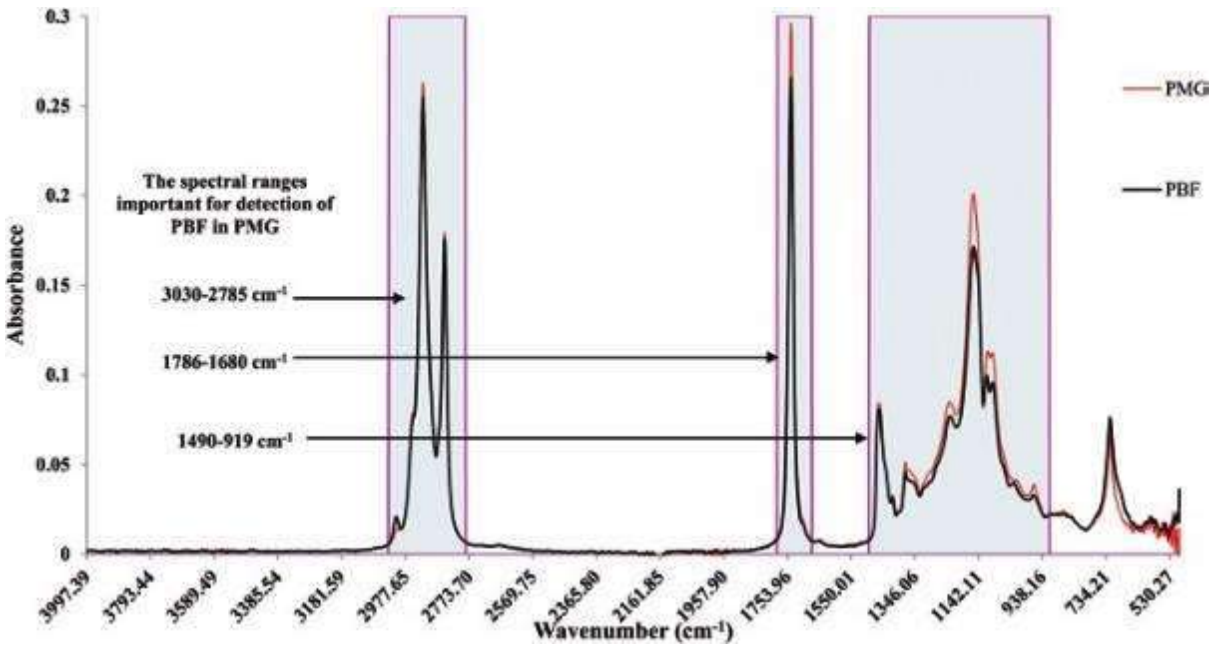
"Companies working aren't quite sure what sort of inputs they should be using to create their end product to make sure it is compatible with local regulatory guidelines," said Tekkatte, science & technology specialist at GFI.

Foods produced using precision fermentation currently fall under the category of 'novel foods', which need to be evaluated by the Scientific Panel of the FSSAI. If the safety of the novel food is established, it can be approved for consumption in India.

"This is a story where India innovates and manufactures for the world," said Bakaraju.

Nova Dairy Urges Government to Ensure Purity of Ghee

SEP 25, 2023
https://dairynews7x7.com/nova-dairy-urges-government-to-ensure-quality-and-safety-of-ghee-products/



Sterling Agro Industries Ltd. (Nova Dairy Products), one of India's leading producers of high-quality dairy products, is deeply concerned about the recent findings by the Wholesale Pure Ghee Merchant Association, based in Indore, Madhya Pradesh, and other associations and merchants from different regions across India, regarding the adulteration of ghee products in the market. In order to safeguard consumer health and interests, Nova Dairy strongly urges the government to take immediate action by carrying out in-depth audits of the ghee produced by various brands.

Recently, the Wholesale Pure Ghee Merchant Association, Indore, tested samples of about 40 to 50 less expensive ghee brands. Surprisingly, a government-approved NABL Lab discovered that all 10 samples submitted for a GIC test were falsified. Given that they are more affordable than well-known brands, these adulterated ghee products are a desirable alternative for customers. Genuine ghee producers' income is negatively impacted, and the general public is exposed to serious health risks as a result.

"Products made with adulterated ghee may contain dangerous ingredients and have lower nutritional value, both of which can be harmful to the health of consumers. Ravin Saluja, the director of Sterling Agro Industries Ltd., states, "It is the government's responsibility to ensure the safety and quality of food products available in the market. Consumers have the right to access pure and unadulterated dairy products, including ghee, without compromising their health."

Nova Dairy urges the government to take action to address this pressing issue, suggesting:

1. Comprehensive Quality Checks: Implement strict and regular quality checks on ghee products produced by all brands, regardless of their size or market presence.

2. Increased Surveillance: Improve the surveillance and monitoring of the ghee market to

find and punish those in charge of creating and distributing adulterated goods.

3. Public Awareness Campaigns: Run public awareness campaigns to inform people about the dangers of consuming tainted ghee and the value of selecting high-quality goods.

4. Regulation Enforcement: Make sure that all ghee producers abide by the laws and standards that are currently in place regarding food safety and quality.

5. Industry Collaboration: Work with industry participants to develop and put into action efficient countermeasures to ghee adulteration.

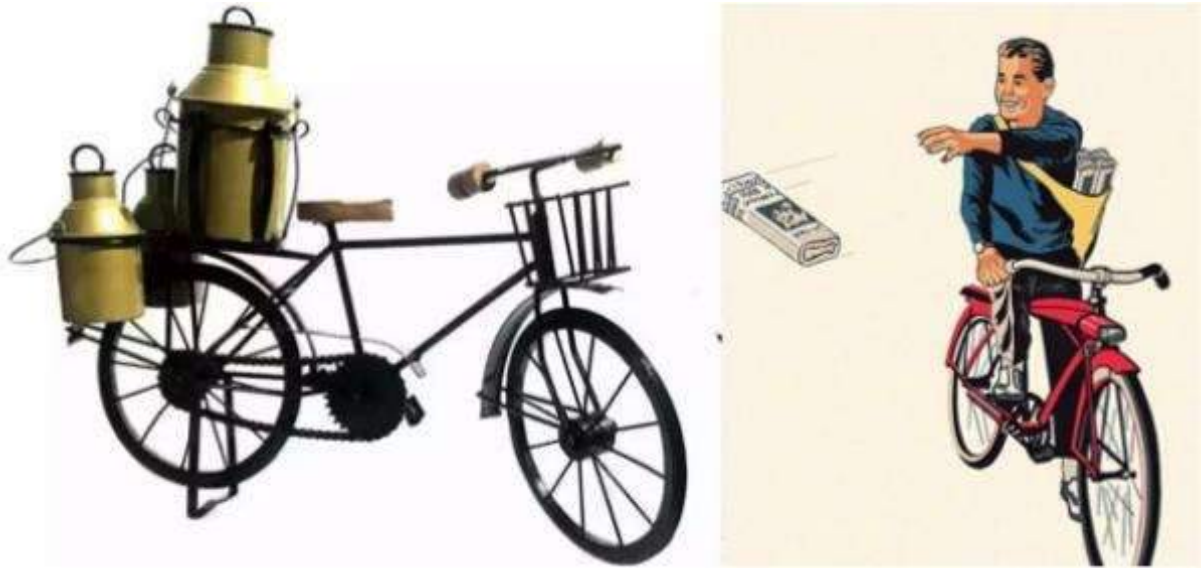
Nova Dairy remains committed to providing consumers with pure and high-quality dairy products. The business contends that by addressing the problem of adulterated ghee, the government can safeguard consumer health, assist real dairy farmers, and uphold the credibility of the food sector.

Nova Dairy urges the Food Safety and Standards Authority of India (FSSAI), the Ministry of Fisheries, Animal Husbandry and Dairying, and other government bodies to take prompt action to address this pressing issue and guarantee the safety and well-being of consumers across the nation. They also ask that fat-profiling tests be made mandatory for dairy production in order to ensure that the quality of dairy products does not deteriorate.

PM-SVANidhi now extends financial assistance to milk vendors

SEP 24, 2023

https://dairynews7x7.com/pm-svanidhi-now-extends-financial-assistance-to-milk-vendors-and-newspaper-hawkers-to-expand-business/



Loan facility under Pradhan Mantri Street Vendor's AtmaNirbhar Nidhi (PM-SVANidhi) has now been extended to milk vendors and newspaper hawkers along with street vendors.

In a press release issued here on Friday, District Skill Development Officer Prabhu Dhore has said that all street vendors and milk and newspaper distributors can get micro loans at minimum interest rate to expand their business by submitting application forms in the required format.

The scheme was launched during COVID-19 pandemic and micro loan facility from banks was extended to street vendors to strengthen their business activities to ensure financial stability. Now, milk vendors and newspaper distributors have also been included under the scheme.

Loan will be disbursed to those selected in three phases. In the first phase, ₹10,000 loan will be given and in second phase, ₹20,000 loan will be given, if the first phase loan is repaid within 12 months from the date of sanction. And, in the third phase, ₹50,000 loan will be given if the second phase loan of ₹20,000 is repaid within 18 months.

Those who require assistance can submit their loan applications online or approach the urban local bodies concerned with the required documents along with bank account details. Such applications will be verified by the banks where the applicants have their accounts. Later, the information on sanction of loan will be given to beneficiaries either by banks or local bodies.

According to official data, so far, 4,070 street vendors, excluding milk vendors and newspaper hawkers, have submitted loan applications in the district and of these, 3,602 have been extended loans. The district had a target to disburse loans to 3,024 beneficiaries under the scheme.

Assam Guv Asks More Coop Societies to Boost Dairy Sector

SEP 23, 2023
https://dairynews7x7.com/assam-guv-asks-more-coop-societies-to-boost-dairy-sector/

Assam Governor Gulab Chand Kataria on Friday asked the government to help set up more cooperative societies in order to strengthen the dairy sector in the state.

With an interest in developing the Animal Husbandry and Veterinary Department, Kataria took briefing of the activities in the presence of minister Atul Bora.

"The Governor asked the department to strengthen the network of milk collection centres to empower the milk farmers as well as to enable them to get the maximum value for their milk. He also said that more cooperative societies should be set up and strengthened to strengthen the dairy sector," an official statement said.

Kataria asked the department to put in more effort to expedite its goal of reaching out to the farmers.

He also stressed that the aim of doubling the farmers' income can be achieved if they get engaged in cattle rearing, poultry and dairy production along with their agricultural practices.

Agriculture Minister Bora expressed happiness for being invited by the governor for the briefing and he said that he is confident that the department will work better to expedite the growth trajectory of Assam.

Principal Secretary Manish Thakur gave a detailed presentation on the activities of the department.

The presentation highlighted the livestock population of the state, steps taken towards departmental reforms and strengthening of the service delivery system through infrastructure, logistics, manpower and medicines.

Thakur also highlighted the status and achievements of the central and state schemes.

Manipal Business Solutions' Innovative Digital Solutions for Rural India

SEP 21, 2023
https://dairynews7x7.com/driving-financial-inclusion-manipal-business-solutions-innovative-digital-solutions-for-rural-india/

CXOToday has engaged in an exclusive interview with Kamaljeet Rastogi, Chief Executive Officer, SahiBnk, Powered by Manipal Business Solutions Elaborate on the specific digital solutions and services that your organization offers to cater to Tier 3 and Tier 4 regions. What are the key challenges you aim to address with these solutions? Being India's fast-growing fintech we are at the forefront of driving financial inclusion by providing banking and value-added services in the hinterlands of India with our technology platforms and wide network of banking agents and business correspondents.

Manipal Business Solutions (MBS) offers integrated fintech solutions like doorstep banking, rural extension branches, e-KYC platforms, and a supermarket for financial products. We aim to empower rural communities and unlock their economic growth potential with our below solutions:

SahiBnk: A financial services supermarket that helps consumers get access to the best-matched financial products and services. It offers tailor-made financial products in partnership with leading Banks and NBFCs providing better choice, convenience, and quality of products to the end consumer. MBS has a network of agents, exclusive SahiBnk stores and an app that makes banking seamless for rural customers.

MBS also partnered with Assam Rural Infrastructure and Agricultural Services Society (ARIAS), enabled access to organized credit to dairy farmers and offered tailor-made banking products like Kisan Credit Card, Cattle Loans, Dairy Loans, etc. through SahiBnk stores and app. Rural Extension Branches (REB): MBS is helping banks increase their rural branches and network, by offering ultra-thin branch facilities to banks in order to be able to reach the underserved segments in rural India.

Our REB services include the entire setup of branches, identifying, hiring, training of agents and end-to-end management, which enables banks to operate branches at one-third of the cost. SahiBnk Mitra – An integrated platform providing real-time secured doorstep KYC solutions to our partner banks' customers at their doorstep through our network of authorized agents. We bring our Plug and Play, a regulatory-compliant solution that comes with quick deployment. SahiBnk Mitra is a single platform catering to the diverse and unique needs of different verticals of banks and financial institutions e.g., Assets, CASA, etc. Besides this, we are accelerating financial inclusion with our extensive network of Business Correspondents

(BCs) who serve as crucial intermediaries, enhancing access to banking services in remote and underserved regions.

These BC agents help local communities with account openings, facilitating cash transactions, enabling money transfers, providing financial education, disbursing loans, and offering insurance services. Through their efforts, we are committed to advancing financial inclusion, ensuring that banking becomes more accessible to underserved communities. The challenge we are trying to address is enabling banking services to the last mile population through an array of phygital services. Leveraging our technology-enabled distribution channel to lead financial inclusion by handholding 'Bharat' to be a part of the formal financial system.

Tell us about the strategic partnerships or collaborations your organization has established with banks to facilitate doorstep banking and digital solutions. How do these partnerships enhance service delivery? Our partnership with leading banks aims to build a sustainable network of Corporate Business Correspondents (CBCs) that will enhance the availability, affordability, and accessibility of financial services, particularly in underserved markets and rural areas. We are also working with banks to develop tailor-made financial products that are specifically designed for rural customers.

Our extensive network of trained Field Business Correspondents (FBCs) enables banks to reach out to individuals with tailor-made products in remote areas and ensure they have convenient access to financial services. Our goal is to empower the underbanked communities, include them in the financial ecosystem, and contribute to the overall development of rural India. What is the extent of geographical coverage in terms of the number of pin codes and states where your doorstep banking and digital solutions are available? How do you prioritize expansion to new regions?

By leveraging digital technology, MBS has sped up financial inclusion in rural India, conducting more than 2 lakh doorstep KYCs per month, covering 9000+ pin codes across India. Our authorized SahiBnk Mitra agents go door-to-door to undertake Aadhar biometric KYC of banking customers, enabling real-time, secure, doorstep KYC solutions to digitally onboard customers, and verify identity in assisted mode. We continue to play a vital role in transforming services in rural India with our wide network of 15000+ business correspondents and business facilitators covering 20,500 villages.

We are also operating 255+ Rural Extension Branches in areas where banks can't or need not set up brick-and-mortar branches. Besides this, we partnered with state governments to train and onboard 8,000+ women as Bank Sakhi to provide rural areas of Uttar Pradesh, Uttar Pradesh, Bihar, and Odisha. Can you provide insights into the current number of active clients and agents involved in your doorstep banking and digital solutions? How do you manage and engage this network effectively? For doorstep KYC we have 4,000+ active agents across 300+ Cities and for other banking services we have a network of 15000+ business correspondents and business facilitators covering a span of 20,500 villages.

What is the average number of daily KYC verifications and conversions your organization handles? How do you ensure compliance with regulatory requirements while maintaining a seamless customer experience? Our authorized agents go door-to-door to undertake 10,000+ Aadhar biometric KYC per day. With SahiBnk Mitra technology-led solutions have transformed manual processes that were otherwise disconnected, rendering procedures seamless with workflow automation systems. With our matured presence in this industry and our associations with multiple lenders, we are bound to undergo multiple audits and hence we always have to be on top of our game to meet regulatory standards, which makes us best in class in terms of compliance adherence.

Data-Driven Decision is Important for Empowering Dairy Farmers

SEP 21, 2023
https://dairynews7x7.com/dr-k-rathnam-shares-data-driven-decision-making-is-important-for-empowering-dairy-farmers-in-india/

Remember a time when decisions were determined with respect to the references from tangible numbers within a ledger? From maintaining sheets and records manually to digitalized data, the journey has been arduous but rewarding. Data has always been an incredibly valuable resource, and its importance cannot be overstated. Data generation and collection in the modern era can be attributed to the constant technological innovations and the proliferation of digital devices across the globe.

Advancements through technology are disrupting and reshaping industries altogether and the dairy industry is certainly not exempted from this trend. **K Rathnam**, CEO of

Milky Mist believes that this data, when properly collected, processed, and analyzed, can offer valuable insights that drive informed decision-making and ultimately improving a farm's productivity and profitability.

Dairy farming, traditionally, to a larger extent relied on intuition and experiences to make up for a decision; however, with the advent of technology, the collection, storage, and analysis of data have become more accessible and affordable. Dr. K Rathnam shares, "Farmers are enabled to base their decisions on concrete insights and not solely on assumptions or intuitions. Real-time data helps farmers to identify the trends, patterns, and impact of their decisions." Data analytics in modern times plays a pivotal role in empowering dairy farmers in the following ways:

- **Improved Resource Allocation:** Effective resource management is a crucial component in dairy farming. With data-driven insights, farmers can allocate resources such as feed, water, and medications more efficiently, reducing waste and controlling costs.
- **Health Monitoring & Performance Evaluation:** Monitoring the health of dairy cattle is essential for maintaining milk production and overall herd well-being. Data analytics helps farmers track individual animal health metrics, detect early signs of illness, and implement timely interventions. "Analyzing data allows farmers to assess the performance of different breeds, individual animals, and even employees. This information aids in identifying top performers and areas needing improvement," observes Dr. **K Rathnam Milky Mist.**
- **Risk Mitigation:** Data analytics can predict potential challenges such as disease outbreaks or drops in milk production. By identifying risks early, farmers can take proactive measures to minimize their impact.
- **Breeding Strategies:** Breeding decisions significantly impact the quality of the herd. data on the genetics, performance, and health of past generations can guide farmers in selecting the best breeding pairs. This promotes the development of healthier, more productive animals.
- **Cattle Health Management:** Data offers insights into the prevalence of dis-

eases, seasonal patterns, and the effectiveness of past treatments. Farmers can use this information to establish more effective disease prevention and management strategies. Milky Mists' effective cattle health management program is backed by scientific principles and an operational process that has been continuously revised per the latest standards of technology.

- **Operational Efficiency:** By analyzing historical data on farm operations, such as milk production rates, labor input, and energy consumption, farmers can identify inefficiencies and implement improvements to streamline their processes.

In the rapidly evolving landscape of dairy farming, data-driven decision-making has emerged as a powerful tool for empowering farmers to optimize their operations. K Rathnam shares that by analyzing historical data and leveraging real-time insights, dairy farmers can make informed decisions that enhance breeding strategies, improve feeding programs, and elevate overall farm management. The integration of data analytics not only increases productivity and profitability but also contributes to more sustainable and efficient farming practices. As the dairy industry continues to embrace technological advancements, data-driven strategies will undoubtedly play a central role in shaping its future success.

17 million Artificial Insemination missing-shortage of milk in India

SEP 21, 2023

https://dairynews7x7.com/17-million-missing-a-dte-analysis-sheds-light-on-why-there-is-a-shortage-of-milk-products-in-india/

India has missed as many as 16.84 million artificial inseminations of cattle and buffaloes during the two years of COVID-19 pandemic. This is likely to have a long-lasting impact on the country's milk production

It just does not add up.

India, the world's largest milk producer for over half a century, is struggling with runaway milk prices. In 2021-22, the country accounted for 221 million tonnes—almost a quarter—of the global milk production, says the UN Food and Agriculture Organization (FAO). Yet, milk prices are at an all-time high.

According to the Department of Consumer Affairs, average retail price of milk has increased by 18.08 per cent in the past two years; a litre of milk now costs upwards of Rs 58, as against Rs 49.18 in 2021.

In fact, since 2022-23, milk price rise has been driving overall food inflation in the country. The National Bank for Agriculture and Rural Development (NABARD), an apex regulatory body for regional rural and cooperative banks, states in the May 2023 issue of its publication *EcoFocus* that the price rise is because of a sharp decline in milk production growth, from 5.3 per cent in 2021-22 to 0.4 per cent in 2022-23.

Amid reports of milk shortage and dairy products like butter and ghee missing from store shelves, Rajesh Kumar Singh, then secretary of the Department of Animal Husbandry and Dairying (DAHD), held a press conference on April 5, 2023.

Singh cited two reasons for this stagnant supply: one, the infectious lumpy skin disease, which has infected 3.2 million cattle and buffaloes across the country in the past year and killed over 0.2 million animals; two, a rebound in consumer demand following the novel coronavirus (COVID-19) pandemic.

An analysis by *Down To Earth* (*DTE*), however, shows there is a third reason: a stagnation in

the number of high-yield dairy cattle and buffaloes between 2020 and 2022.

During the past two years, as lockdowns and restrictions on movement were imposed in phases to curb the spread of SARS-CoV-2, the country has likely missed 16.84 million artificial inseminations—a vital technology used to accelerate genetic improvement of breeds that have low productivity.

In artificial insemination technology, semen is collected from a bull with proven superior genetic merits and is stored at ultra-low temperatures (known as cryopreservation) at the country's more than 99,000 artificial insemination centres.

It is then introduced to the reproductive tract of the female cattle at a time when it is ready for conception (also known as oestrus period that coincides once in 21 days).

In Europe and North America, approximately 80 per cent breeding in dairy cattle is done through artificial insemination. In India, the coverage is 30 per cent, yet the contribution of artificial insemination to improving milk production has been significant.

"Using this technology [artificial insemination] several crossbreeds/strains like Karan Swiss, Karan Fries, Frieswal, Sunandini, Phule-Triveni and Vrindavani cattle with high milk production potential have been developed. These and other crossbreds and upgraded cattle and buffaloes have propelled growth in Indian dairy industry," states a November 2020 policy paper, titled *Livestock improvement through artificial insemination* by the National Academy of Agricultural Sciences, New Delhi.

According to the policy paper, there is a direct positive correlation between milk production and artificial insemination observed in the dairy sector of the country.

In all likelihood, this improvement has suffered a major setback during COVID-19. According to the *Basic Animal Husbandry & Fisheries Statistics-2014* report, as many as 50 million artificial inseminations were conducted in the country in 2010-11.

Adoption of the technology grew over the next 10 years to reach more than 80 million inseminations in 2019-20, just before COVID-19 hit the country. This is a growth of 5.4 per cent a year, on average.

A back-of-the-envelope calculation shows that at this rate, the country should have conducted 84.65 million artificial inseminations in 2020-21 and another 89.23 million the following year—in other words, 173.88 million artificial inseminations should have been done between 2020 and 2022.

Instead, the country conducted only 157.04 million artificial inseminations, shows the latest *Basic Animal Husbandry Statistics 2022* report published on June 23, 2023. This is a gap of 16.84 million.

Given that the average conception rate of artificial insemination in India is 35 per cent, according to the National Dairy Development Board, the 16.84 million missed artificial inseminations amount to 5.88 million missed conception of a high-yield bovine.

Since the probability of getting a female calf is 50 per cent per pregnancy, the 5.88 million missed conception also means that India missed the chance of adding 2.97 million high-yield female cattle to its livestock inventory in 2020-22, and improving its milk production in the next two years.

This loss is despite the fact that between 2020 and 2022, the Union government was implementing the Nationwide Artificial Insemination Programme (NAIP) on a campaign mode, as part of the Rashtriya Gokul Mission scheme that aims for genetic upgradation of all breeds of bovines and enhance their milk productivity using advanced technologies.

As many as 67.67 million artificial inseminations were conducted under NAIP, whose fourth phase ended in May 2023. In other words, in the absence of NAIP, India would have missed a much higher number of artificial inseminations.

Role of Milk and Milk Products in Health and Disease Prevention”

SEP 20, 2023

https://dairynews7x7.com/role-of-milk-and-milk-products-in-health-and-disease-prevention/

The seminar was organized by IDA(WZ) On September 12th 2023 in association with following partnering institutions:

Association of Food Scientists and Technologists India (AFSTi), Institute of Chemical Technology (ICT), Shree Vitthaldas Thackersey College, SNDT University, GN Khalsa College (Autonomous) and Bombay Veterinary College, MAFSU and Consumer Guidance Society of India (CGSI).

[Team IDA (Left to Right- Mr. Rajesh, Ms. Richi, Dr. Parekh, Mr. Hariom, Mr. Madhav, Dr. JB Prajapati, Ms. Candida, Mr. Kuldeep Sharma and Mr. Shyju]

The national seminar commenced with lighting of lamp and welcome address by Dr. J.B. Prajapati, Chairman, IDA (WZ). While welcoming the guests, he expressed basic views on why milk is pious and cited some quotes from Vedas, signifying the significance of milk and milk products in Indian diet. He also highlighted activities of Indian Dairy Association and the plan to organize such awareness programs pan India during the celebrations of 75 years of IDA.

Dr. R.S. Sodhi, President, IDA, New Delhi, enlightened the audience on trends in dairy market, which is a 3 trillion USD out of a total of 5Lakh crore market share, dairy alone contributes to 2.8 lakh crores.

The unorganized sector in dairy is dynamically converting to organized. He gave an overview of market trends in cereals, vegetables & fruits, milk and animal meat sectors in last 5 decades. Milk has grown 10 X while fish and poultry have increased by 12 and 23 X respectively. The Indian dairy production scale was 24 metric tons in 1948 and in 2022 it has crossed 222 metric tons, which demonstrates the huge success that Indian dairy has witnessed. He remarked that the Indian supply chain is excellent and both production and consumption are increasing. He emphasized that 3 parameters control the success of any new food product- taste, nutritive value and affordability. A short comparison of cow and buffalo milk was made. Few market trends on packed versus branded foods were also discussed. He believes that inflation in food industry is one of the major challenges in food sector. He also briefed the audience on how sustainable the Indian dairy market is, and that we contribute to only 5% emissions of the world.

Dr. Meenesh Shah, Chairman NDDB, couldn't attend the meeting physically but he delivered a brief talk online. He underlined the pace at which research depicting nutritional and health value is increasing as seen by research papers in reputed journals. He touched upon the biological activities of few proteins and bioactives in milk, imparting health benefits on the host. Currently, 40% of population which is youth needs to shift focus to healthy body. He featured some interesting findings of the programs run by NDDB. To about 480 government schools, NDDB offers milk fortified with Vitamins A & D. Another study at Ghadchiroli Anganwadi studies impact of dense laddoos provided to over 5000 young kids between 4-6 years of age. He touched up on the sources on plant-based proteins and why those proteins cannot be compared with natural milk. Additionally, plant-based milk, lacking natural sugar has to incorporate stabilizers, emulsifiers, sugar etc. He congratulated the IDA and conveyed his best wishes for the program.

The keynote address was delivered by Padmashri **Dr. V. Mohan**, Chairman and Chief of Diabetology, Madras Diabetic research foundation, Chennai. The presentation commenced with vedic mentions of cow milk and significance. He gave an overview of components in milk and their roles and cited several publications depicting the statistically significant results advocating no harm on milk consumption. Research findings supporting yoghurt and cheese consumption, specifically was shown to prevent the development of Type 2 Diabetes. He also shared the findings of The Prospective Urban Rural Epidemiology (PURE) study, which involved the study on 2,50,000 patients in 21 countries over 20 years. People consuming milk and milk products was correlated with increased longevity. He holds the record of largest number of publications (1600) to his credit. Overall, it was concluded that dairy products are either protective or neutral on several metabolic diseases, but never the causative agent for any ailment.

As part of the program, a reel making competition among the students of partner institutions was also organized. Total 32 students submitted reels on role of milk in nutrition and health and prizes to five best reels were given during the inauguration program. The winners were: Mr. Kevin Bhensdadiya – SMC College

Mr. Siddhartha Pandya – G N Khalsa College

Mr. Sidra Nagori – SVT College

Ms. Khushi Jaiswal – SVT College

Mr; Abhishek Shinde – College of Dairy Technology – Warud

At the end Dr. J. Parekh, Vice Chairman, IDA (WZ) presented vote of thanks. The anchoring of the entire program was done by Ms. Richie Agrawal, Member of ZEC (WZ).

Panel discussion 1:

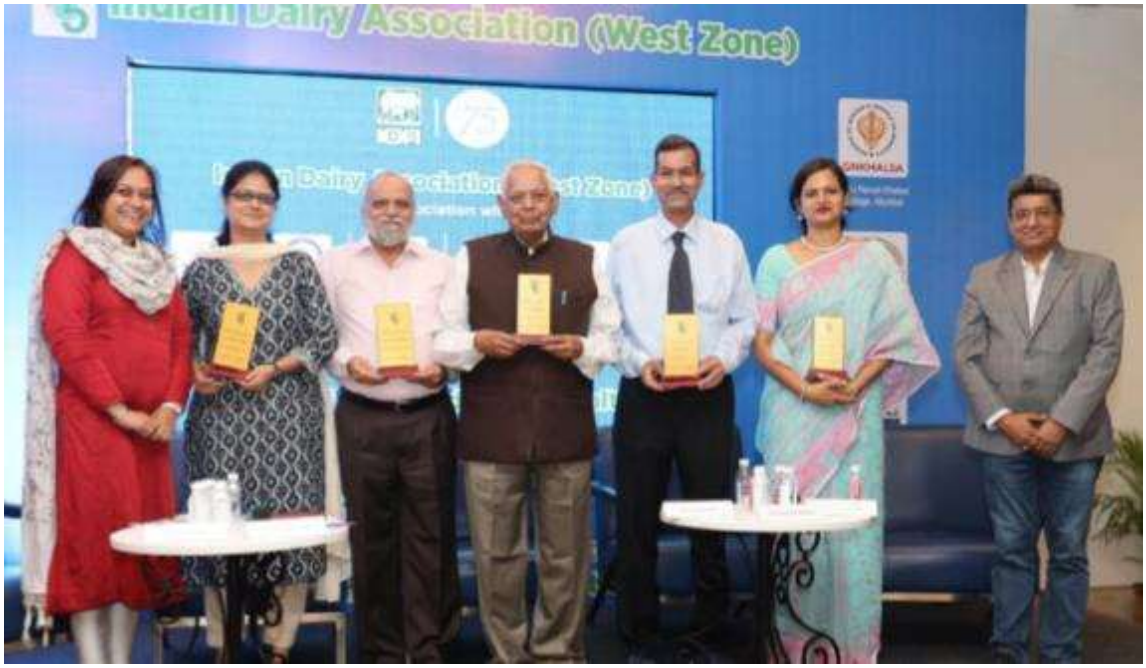
The theme of the session 1, which was moderated by **Dr. J.B. Prajapati,** was "Milk and lifestyle diseases and immunity". Panelists included – **Ms. Sheryl Salis**, Certified diabetes educator, Insulin pump specialist, Founder-Nurture Health solutions, Mumbai, **Dr. Jagmeet Madam**, Principal SVT College, Mumbai and **Prof. Smita Lele**, Former Head of Food technology department, ICT and **Ms. Laurence Rycken**, Nutrition Officer, International Dairy Federation (IDF), Brussels. Questions enquired to the panelists revolved around role of milk in general health, control of obesity, hypertension, bone health, and immunity boosting. Prof. Lele quoted Nature is a great nutritionist and provided a wholistic approach about milk and milk products. Excerpts of the discussion touched upon few points- milk as complete food, human and cow milks are close in composition but carb to protein ratio is quite different. Human being has got all enzymes to digest lactose since centuries, still some people have lactose intolerance. They are advised to take low lactose milk or dahi/butter milk, where in about 25% of lactose is already broken down. Being vegan or not is one's personal choice but defaming milk is not right. For that matter we can't photosynthesize so are we cruel in consuming cereals etc.? A small comparison between vegetarians and non-vegetarian sources of proteins were made. Ms Laurence made an online presentation, depicting the initiatives taken by IDF to educate the society about goodness of milk and spread the message on role of milk in nutrition and health.

(From left to right-Prof. Smita Lele, Dr. Prajapati, Dr Madan and Ms. Salis)

Panel discussion 2:

Dr G.S. Rajorhia, Ex. President, IDA, chaired the second panel discussion themed "Milk in nutrition for sports person and elderly" where panelist included- **Dr. K.D. Aparnathi**, Retd. Head, Dept of Dairy Chemistry, SMC College, Anand, **Dr. Panchali Moitra**, Professor, SVT Mumbai, **Dr. Atanu Jana**, Principal, SMC College College, Anand and **Dr. Kavita Pandey**, Assistant Professor, GN Khalsa College, Mumbai. Dr. Rajorhia first enlisted few points that missed a mention, in his opinion like why milk is termed "Amrit". The discussion included comparison of plant-based milk and cow milk, followed by its importance in sports persons and geriatric usage. Dr. Jana touched upon the art of cheese making and bioactives present in cheese. Dr. Pandey talk about impact of lifestyle choices on gut microbiota and

the need for probiotics and functional foods in diet on general population and sports persons. Biochemistry involved in health benefits mechanisms were highlighted.



(From Left to Right-Ms. Richie Agrawal, Dr. Panchali Moitra, Dr. KD Aparnathi, Dr. GS Rajorhia, Dr.Atanu Jana, Dr. Kavita Pandey and Mr. Madhav Patgaonkar)

Panel discussion 3:

Mr. Kuldeep Sharma, Founder, Suruchi consultants, New Delhi moderated the final panel session themed "myth breakers on milk in Ayurveda" The panelists were **Dr. Aditi Gohel,** SVT College, Mumbai, **Mr. Sitaram Dixit,** Chairman CSGI, Mumbai and **Shri. Yachneet Pushkarna,** MD Hari Bol Dairy – ISKON. Panelists discussed about myths and facts about milk and its significance in Ayurveda. They touched upon the consumer perception on milk. A case study of Hari Bol Dairy established by ISKON producing Ahinsa milk was also presented, were cows are treated like family members and their waste products are enriched and utilized to make it a sustainable unit.

(From Left to Right-Mr. Madhav Patgaonkar, Dr. Sitaram Dixit, Dr. J B Prajapati, Kuldeep Sharma, Mr Yachneet Pushkarna, Dr. Aditi Gohel and Ms. Richie Agrawal)

The concluding session was chaired by Dr. J.B. Prajapati, where he presented the summary of the entire day's discussions. The sponsor M/s D'Lecta was honored. Mr Madhav Patgaonkar, presented vote of thanks.

AC approves transfer of land for Dairy Research Center, Anantnag

SEP 20, 2023
https://dairynews7x7.com/ac-approves-transfer-of-land-for-research-center-anantnag-milk-processing-center-budgam/

The Administrative Council (AC), which met here under the chairmanship of the Lieutenant Governor, Manoj Sinha, approved the transfer of land measuring 500 Kanal 11 Marla at Sallar Anantnag in favour of Sher-e-Kashmir University of Agricultural Sciences & Technology (SKUAST) Kashmir for establishment of Research Station and additional Krishi Vigyan Kendras.

Rajeev Rai Bhatnagar, Advisor to the Lieutenant Governor; Dr. Arun Kumar Mehta, Chief Secretary, J&K and Dr. Mandeep Kumar Bhandari, Principal Secretary to the Lieutenant Governor attended the meeting.

The Research Station shall provide scientific technologies to improve productivity in agriculture farming and enhance the economic well-being of farmers. The establishment of the Research Station and additional Krishi

Vigyan Kendra shall have a major impact for creating awareness about improved agricultural technologies through a large number of extension programmes and produce quality inputs like seeds, planting materials, organic products, bio-fertilizers, livestock and poultry strains of the farmers.

In another significant development, approval has also been accorded for transfer of 47 Kanals 13 Marlas of land at Chadoora, Budgam in favor of Animal and Sheep Husbandry department for establishment of milk processing infrastructure.

The establishment of milk processing infrastructure shall bring multifaceted benefits that encompass economic development, job creation, improved nutrition, food security, and the enhancement of agricultural practices. It will upgrade the dairy industry by promoting the overall well-being of communities and economies.

The dairy industry on J&K holds immense potential for UTs economy, providing employment opportunities and contributing to the local population's wellbeing. With increasing demand for the dairy products and per capita availability of milk being lower than many milk potential states, the dairy sector is poised for significant growth in the UT in coming years.

"We will scale our organics portfolio in a short time": Jayen Mehta

SEP 20, 2023

https://dairynews7x7.com/we-will-scale-our-organics-portfolio-in-a-short-time-amuls-jayen-mehta/

Gujarat Co-operative Milk Marketing Federation Ltd (GCMMF), which markets Amul, the largest FMCG brand in India, is sponsoring the Indian contingent for the Asian Games in China beginning September 23, opening premium Ice Lounges and building a new health-food portfolio. In an interview to Storyboard18, GCMMF's managing director in-charge, Jayen Mehta, spoke of Amul's vision to become a complete foods brand with special focus on creating an affordable range of organic products and associating with sports to promote health and nutrition.

Edited excerpts:

What does it mean to be heading the country's largest FMCG brand?

I have been with GCMMF for the last 32 years

so for me it is more of continuity. But in context it looks good because when I joined in 1991, Amul's turnover was Rs 700 crore and it's a 100-fold increase to Rs 72,000 crore. The time is exciting because even on this base, a multi-fold growth looks very possible and achievable.

With liberalization of the economy in 1991-92, protection for co-operatives vanished overnight and foreign capital could freely come in. We had to reinvent ourselves. We underwent the change management programme and implemented total quality management across the organization. The rest, as they say, is history. Amul emerged as the largest dairy brand and the largest FMCG brand.

The good part is that in the last one or two years, there's been a return of belief that co-operatives are a model which will work. We are seeing more focus on co-operatives with the Finance Minister announcing new policies and a new ministry of cooperation. Of seven lakh villages, India has about 2 lakh villages cooperative societies. We are talking of adding another 2 lakh village co-operative societies.

We have been given the opportunity to incubate two new multi-state cooperative societies and one is on organics. This is a big initiative where farmers will be encouraged to produce organic stuff and consumers will get products which are without chemicals, fertilizers and pesticides.

It's a very interesting time for not only doing what we've been doing at Amul but also building something new which will be even bigger and more lasting in times to come.

Is Amul getting into newer product categories in 2023 — its golden jubilee year?

Though Amul dairy started in 1946, the marketing Federation was born in 1973, so, yes, it is our golden jubilee. Besides core dairy, there has been a sharp focus on new categories of late. After covid 19, we realized that immunity is very important. While we have been working in probiotics since 2006-2007, we recently converted all the pouch butter milk that we sell into a probiotic product without increasing the price. We sell close to 30 lakh litres of butter milk a day and it costs Rs 30 for a litre. There is no limit to growth opportunity in this.

Second is protein. We are the largest protein handlers in the country since we handle 3 crore litres of milk a day and milk has 3% protein. But once we make cheese from milk, what is left is whey protein. We are using that to make high protein lassi and buttermilk. Soon we will

launch high protein yoghurt, ice cream, shakes, cookies and chocolates. We want to make protein available, affordable and tasty for the masses.

The high protein lassi and buttermilk is already sold online. In a month or two the remaining products will be rolled out and made available online.

What about offline retail distribution?

Eventually they will come to retail stores. We have yet to create awareness around these products. We will sell just one theory, that is, you need one gram of protein per kg of body weight every day for every member of your family and here's our range which will not burn a hole in your pocket.

What about organic foods?

We have already launched 8-10 products such as organic atta, pulses, rice etc. We are soon launching organic sugar, jaggery, spices and tea – so practically every item you consume in your kitchen will be Amul Organic.

But, so far, the premium on organics has been much higher than what should be normal. Since the product is niche, the chain becomes dominant rather than the producer or the consumer. The retailer and trade margins are very high and the products are priced higher. So, the market remains small. If the market is small the channel will demand more. But we have to make organic food democratic and make it affordable to all.

In organics, the key is sourcing. We have to source an organic product from a certified farmer, do lab tests to see if it's free from pesticides and heavy metals and then process it in an organic certified plant. The finished food has again to be tested the same way with same parameters, and then with the organic label it has to be sold in the market.

So it is this backend work which is taking time. We have set up our own lab at Gandhinagar to test the products and are also working with independent labs and certifying agencies.

But how will you ensure affordable pricing?

The farmer has to be slightly incentivized because he's sacrificing the productivity which he was otherwise thinking of getting through chemical fertilizers and pesticides. He needs time to convert from non-organic to organic. He needs to be educated. We need to commit that there will be a market for his organic produce. We are working with several farmer associations across the country.

It is by no means an easy journey. But we will scale it up in a very big way in a very short time.

Does this mean that Amul's dairy business may become smaller?

Milk will remain big. Our entire structure – the 3.6 million farmers, thousands of cooperative societies, 98 dairy plants – are all dependent on milk. Milk is consumed 365 days, across all households and gives Amul a chance to enter homes. Our way to your home is already there. Now I have to increase my share of your "thali" which gives us a huge opportunity.

What was the trigger behind Amul's new premium Ice Lounges?

We are doubling our capacity and the ice cream business has been doing very well. But the Indian consumer is also wanting to experiment. So we got this concept of bringing you the best ice cream flavours in every country in the world through Ice Lounges. We are looking at the premium segment and looking to open in the best malls and airports. We plan to have 100 lounges here and 100 outside India.

How much does Amul spend on advertising? Have you increased your advertising and sponsorship budget?

We've been consistently spending one percent of our turnover on advertising all these years and we will continue to be within that range.

We are big on sports too. In the cricket Asia Cup we were on the ground and on television. It's too early to announce, but we are tying up with teams for the cricket World Cup. For Women's IPL we are the beverage partner for three years.

We are now the official sponsor of the Indian contingent for the Asian Games. We associate with sports because that audience is turning out to be very, very core for us, especially since we promote health, nutrition and energy. Besides, anything to do with live sports has good viewership so it is a good combination.

FSSAI begins milk & milk products' survey across 766 districts

SEP 18, 2023

https://dairynews7x7.com/fssai-begins-milk-milk-products-survey-across-766-districts-to-submit-report-by-december/

In all, 2,801 milk product samples from organised and unorganised sectors were collected from 542 districts across the country for the 2020 study. Image Courtesy: Unsplash.

The Food Safety and Standards Authority of India (FSSAI) has started a nationwide surveillance study on milk and milk products this month, in a bid to curb adulteration of such items, an official of the country's apex food regulator said on Monday.

"The surveillance survey will cover 766 districts across the country and over 10,000 samples will be collected during the exercise. Two agencies have been engaged for the purpose," he told PTI.

Quality Council of India, an autonomous body under the Ministry of Commerce and Industry, and the National Dairy Development Board will conduct the survey for FSSAI, Panda said.

"The scope for the survey includes milk, khoa, chenna, paneer, ghee, butter, curd, and ice cream. The test parameters are adulterants, normal quality and compositional parameters, contaminants, antibiotic residues and microbiological indicators," he said.

The rationale behind choosing milk is its indispensable role in food culture either as a fresh fluid or as a processed dairy product, he said. "We are hopeful of submitting a report on the findings of the survey to the health ministry by December," Panda said. One of the objectives of the study is to devise corrective action strategies, the official said. The regulator has conducted five surveys on milk and milk items since 2011.FSSAI had, in 2022, conducted a milk survey in 12 states, including 10 where the Lumpy Skin Disease (LSD) was prevalent. It also undertook the PAN India Milk Products Survey, 2020 to understand the true picture of the safety and quality of milk products being sold in the market during festivals.

The silent saboteur: Unveiling the dark side of adulterated milk

SEP 18, 2023

https://dairynews7x7.com/the-silent-saboteur-unveiling-the-dark-side-of-adulterated-milk/

The greatest agricultural product in India is dairy, which supports millions of farmers nationwide and accounts for 5 per cent of the country's GDP. Interestingly, India is the world's largest producer of milk, accounting for almost 23 per cent of the world's total production. India also exports dairy products worth more than $200 million to other countries.

However, sadly, milk adulteration is a significant concern in India, with reports of unscrupulous practices such as dilution with water, contamination with detergents, and even addition of harmful chemicals. This poses serious health risks to consumers and challenges the integrity of the country's dairy industry, warranting stringent regulations and enforcement measures.

Milk adulteration in India

It's critical to comprehend why milk adulteration is still a major problem in India. The primary reasons are as follows:

1) Big gap in demand and supply. Cattle produce is not sufficient for the demand.

2) Next is the lack of scientific methods for maintaining cattle.

3) Lack of hygiene and then lack of proper storage methodology results in an increased propensity for wastage, therefore inadvertently promoting the usage of adulterants.

4) Additionally, people's greed to extract maximum value makes them use unethical practices like giving hormone injections to cattle to increase their productivity.

5) Lack of proper testing laboratory methods and still using organoleptic testing is a major concern. This is a manual procedure where a milk grader determines the aroma and taste of the milk to manually determine the presence of any foreign item. Milk is taken from numerous sources and pooled together in a big vessel after this basic quality test. Adulterations are diluted as a result, making them more difficult to detect later. This is typically where tainted milk enters the supply chain.

The gathered milk is transported to large cooling facilities where it is examined for adulteration and nutritional content. If adulteration is found, hundreds of litres of milk are wasted, resulting in significant food waste. However, because of a lack of adequate lab testing methodologies, and dilution of adulterants, they are not picked up by routine lab tests.

Through this procedure, the tainted milk advances through the supply chain to the processing facilities, where it eventually finds its way to us, the customers. Milk is a crucial component of the Indian diet, with both adults and children consuming large amounts of it as a drink nationwide. The same milk is used to prepare products like Dahi, Paneer, Khoya, Butter, and Sweets that are very fondly consumed, creating a multi-fold problem. Therefore,

tainted milk is easily introduced into our diets and contributes to a host of health problems.

Negative effects of milk adulteration and contamination

Since milk is consumed every day, there is always a huge demand for the product. And during festivals, it surges. As a result, handling the supply side of it is difficult. When providers attempt to close this demand-supply mismatch while still making excessive profits, adulteration typically occurs.

The perishable nature of milk, flaws in quality assurance, and the cost of the completed product are additional variables that allow unethical people to take advantage of the public. Major health problems may result from this exploitation. In general, regular use of milk that has been tainted or falsified might result in:

– Organ malfunctioning

– Heart-related problems

– Cancer

– Poor vision

– Kidney problems

– Children's asthma issues and an increase in hyperactivity are also linked to adulterants like salicylic acid and benzoic acid.

– Additionally, kidney and gastrointestinal problems are brought on by it. The kidneys are overworked, and renal failure may result. It may irritate the digestive tract, resulting in nausea, vomiting, and diarrhoea.

Milma's 2023-24 budget anticipate ₹1.22 crore surplus

SEP 18, 2023
https://dairynews7x7.com/milmas-2023-24-budget-anticipate-%e2%82%b91-22-crore-surplus/

The annual general body meeting of the Kerala Co-operative Milk Marketing Federation, known by its brand name Milma, has adopted a growth-oriented budget for 2023-24 pegging the revenue at ₹680.50 crore and expenditure at ₹679.28 crore, anticipating a surplus of ₹1.22 crore during the financial year.

The AGM also adopted resolutions covering a wide range of key issues relating to the milk sector in the State. The budget made allocations for Milma's cattle feed factories at Pattanakkad and Malampuzha, Central Products Dairy at Alappuzha, and the headquarters expenses, besides making provisions to ensure remunerative returns to farmers and initiatives to step up productivity.

The surplus budget will definitely help Milma achieve further growth overcoming the challenges on the way. The AGM also took an overview of the dairy scenario and came out with fruitful suggestions to strengthen the ecosystem by increasing productivity and attracting youths to dairy farming, besides identifying live issues that need to be addressed with the support of the state and central governments, Milma Chairman K S Mani said.

The meeting noted that the brand repositioning initiative launched by KCMMF has contributed significantly to increase in sales of Milma's products.

The meeting, however, held that considering the sharp decline in procurement of milk, effective steps needed to be taken to improve productivity and reduce the input cost with the support of the government and allied agencies, besides launching schemes to attract the young generation to the dairy sector.

The AGM also adopted resolutions seeking implementation of a comprehensive insurance cover for all milch animals and a scheme to offset interest on bank loans availed by farmers for purchase of livestock.

Resolutions were also adopted covering a wide range of issues like reforming the licence provisions for dairy activities, exemption from GST

on dairy products and audit cost, and exempting milk co-operative societies from income tax.

The meeting also sought financial assistance from the Central government for cultivation of silage, green fodder and maize, inclusion of dairy farming under the purview of employment guarantee schemes.

In Arunachal, a parlour for yak milk -Ship of the Himalayas'.

SEP 17, 2023

https://dairynews7x7.com/in-arunachal-a-parlour-for-yak-milk-or-milk-of-the-the-ship-of-the-himalayas/

A high-altitude village in Arunachal Pradesh, known for a 1962 war memorial, has added a first-of-its-kind parlour for milk from a bovine animal that's often called 'the ship of the Himalayas'.

Travellers to and from Tawang invariably stop at the Nyukmadung War Memorial to pay homage to Indian soldiers who died fighting

Chinese aggressors nearby on November 18, 1962. The main memorial is a 25-foot-high chorten — a Buddhist shrine — conforming to local ethos and traditions.

The village, at about 2,800 metres above sea level, now sports the Nyukmadung Dairy at the farm of the Indian Council for Agricultural Research-National Research Centre on Yak, or NRC-Y. The farm in the West Kameng district is about 25 km from Dirang, where the yak research centre is situated.

"The dairy, inclusive of a parlour, was opened on September 15 with the objective to make yak farming more remunerative by making yak milk and its diverse derivatives such as designer paneer, ghee, curd, and ripened and mozzarella cheese popular," Mihir Sarkar, Director of the NRC-Y, said on Saturday.

The facility was inaugurated by S.P. Kimothi, a member of the New Delhi-based Agricultural Scientists Recruitment Board.

The yak (Poephagus grunniens) is the lifeline of highland ethnic communities living in the Himalayan and trans-Himalayan regions in conditions not favourable for any type of agrarian activities. The animal sustains the livelihood of the highlanders by yielding milk, meat, fibre, hide, and dung apart from being used for transportation.

Yak milk and milk products are the integral components of the diet of these highland communities thriving in an extremely hypoxic and harsh environment without vitamin and mineral supplements, NRC-Y scientists said.

Yak milk is creamy white, thick, sweetish, fragrant, and richer in protein, fat, lactose, minerals, and total solids than cow milk. It contains 15.63-19.63% of total solids with 5.29-8.73% of fat, 3.45-4.27% of protein, and 0.64-0.82% of ash.

In general, yak milk is considered naturally concentrated milk enriched with a higher nutrient density and loaded with omega-3 fatty acids, amino acids, and antioxidants. It also has vitamins and minerals.

Although raw yak milk is inadequately available for consumption due to the remote habitat of yak rearing, most of it is processed into various traditional products like chhurpi (wet soft cheese), churkham (hard cheese) and mar (butter), and a small portion of the

raw milk is had in the form of butter tea for the communities' own consumption, with a little left for sale.

The NRC-Y has been working on diversification and value-addition to make yak milk and milk products suitable for commercial production. The activities include hands-on training and capacity-building programmes for tribal yak farmers.

Veganism Isn't the Answer to India's Dairy Industry Politics

SEP 17, 2023

https://dairynews7x7.com/veganism-isnt-the-answer-to-indias-violent-brahminical-dairy-industry-politics/

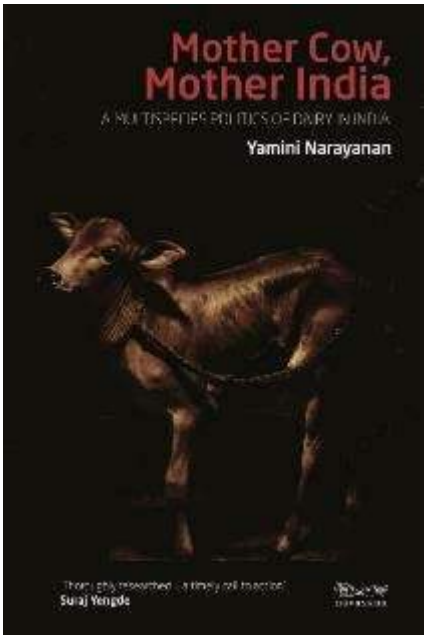
Yamini Narayanan's Mother Cow, Mother India, published in 2023 by the Stanford University Press, and recently published in India by Navayana Publications, interrogates the politics of milk and dairying in India, the critical space it occupies as a sacred commodity in the religious imagination of Hinduism, and how the latter's framing of cow as mother is human domination where bovine motherhood is at once capitalised, commodified and exploited for milk production and simultaneously weaponised by right-wing Hindu nationalists to violently oppress Muslims and Dalits, towards creating a Hindu State.

A simplistic framing of cow politics as a Hindutva versus Secular politics has allowed for the depoliticisation of milk as a product that in the words of the author 'contributes to the violence to animals, a gendered, racist, anthropocentric, neutralization of harms intrinsic in dairying'. Through research in sites of cow production and protection, she sets out to politicise milk over the unfolding 305 pages, which she asserts will force us as humans to 'consider the living lactating animals vulnerability as a dairy resource, as well as those of racialized humans entrapped in specific segments of India's milk production. Whilst flagging the necessity of the Hindu State to constantly create internal enemies, which translates into racial, casteist and fascist violence against Dalits and Muslims, marked and othered for ostensibly being 'anti-cow', because they eat beef, she describes how parallelly violence is unleashed against bovines in animal agriculture. She unpacks and explores cow protectionism by framing cows and buffaloes as political subjects and not objects of political analysis. Herein she stresses on the political nature of human-animal hierarchies and relations, and introduces anthropocentrism to the political analysis on cow protection. Narayanan argues that her

'politicised multispecies ethnography is also an anti-caste methodology, and a plea to all caste groups to engage seriously with the decommodification of animals to undo the violence of anthropocentrism, as a necessary precursor to dismantle caste.'

Narayanan, in her first chapter, outlines the continuum between India's milk and beef economies, and how beef and other post-slaughter products are byproducts of dairying. She denounces the resounding silence across Indian politics, dairy and beef sectors about the veal industry, which is the flesh of discarded male calves separated from their dairy mothers at birth. She discusses the centrality of the cow to all forms of Indian nationalism – Hindutva, Congress or Development Nationalism, facilitated by the internal contradiction of Article 48 of the directive principles of state policy, which guided states to promote scientific breeding of bovines whilst prohibiting their slaughter. This reflected the impossible endeavour of a newly independent India to mediate secular democratic and Hindutva nationalism, with false promises of a 'slaughter free' dairy industry. It also was an early victory of the Hindutva right to use the symbol of the self-sacrificing mother cow, and the anti-slaughter clause therein, to advance their vision of restoring a supposed 'pre-Islamic' pure Hindu State.

The cow was no less significant for Congress nationalism, with the latter equating cow protection to the defence of India, and associating cow milk with the purity of the nation. She concludes the chapter discussing the importance of dairying in the project of post-colonial nation building, for which Article 48's scientific breeding clause became critical, via which the bodies of cows and buffaloes experienced the most extractive forms of commodification. She traces how scientific breeding technologies to promote high-yielding Jersey and Holstein Friesan dairy breeds, have been central India's White Revolution, which simultaneously unleashed huge violence upon animals, particularly the unwanted, unproductive and dry 'foreign cows' and their male calves, hugely vulnerable to illegal trafficking and slaughter. Through subsequent chapters she vividly discusses the cow/buffalo subsidisation of milk production and the making of Secular/Hindu India, within the contested context of the 'utilization of the cow as an economic resource for Secular India which demands her slaughter, against the instrumentalization of the cow as a political resource for a Hindu India which demands the maintenance of her life, through the enforced labour of their bodies and disruption of their family bonds'.



Yamini Narayanan
Mother Cow, Mother India
Nayavana, 2023

In chapter 2, the author describes the extreme violence, suffering and distress experienced by bulls milked for their semen which is frozen, and used to artificially inseminate dairy cows, a core activity in the scientific breeding of cows. She draws heavily from similar research of dairy industries located in the global north, to demonstrate how scientific breeding is replete with 'gendered commodification' and 'sexualized violence'. There is a caste system

across bovines, where the sacrality of the Brahmin humped Indian cattle breeds, and the 'disgust, loathing, and stigmatization of buffaloes', is akin to the practice of 'untouchability' in humans. These are historically related to power struggles between groups: the buffalo was regarded as sacred by the peoples of the Indus Valley civilisation, and the settler pastoralists and their cows eventually became the 'upper castes', with the sacrality of the cow gradually and firmly being established in Brahminical doctrine.

She flags how scientific breeding has contributed to intensification of casteised speciesism very evident in the sites of cow protection: cow worshippers and vigilantes, worship the traditional purebred humped Indian cow breeds as the sacred mother goddess. Crossbred Jerseys and Holsteins are mere 'animals', shunned as 'unholy' by Hindus, and the buffalo, which is ironically India's most commercially valuable animal, treated with utter contempt. This casteist perception of animals is used to justify violent factory farming dairy practices such as separation of calves from their mothers at birth and forbidding them to suckle. New breeding technologies such as semen sexing, to completely erase the population of 'unwanted male calves', advocated by animal welfare activists as a win-win situation for humans and animals, is mere 'humane-washing'.

'Milking', the title of chapter 3, dwells on the violence and cruelty associated with birthing and the separation of mother and calf which is intrinsic to industrial dairying, the resultant emotional trauma of mother cows and buffaloes, the starvation and slow painful death of calves if male, the tortuous milking by milk machines and the susceptibility of high-yielding dairy breeds to chronic mastitis, exacerbated by disallowing calves to suckle their mothers. Increasing incidence of mastitis and reproductive diseases in dairy animals translates to a stream of discarded bovines let out onto the streets, subjected to cruelty and finally slaughtered. The viciousness continues in the 'illegal' peri-urban dairies where animals are intensively confined in completely unliveable conditions, the illegal dairy use of oxytocin to milk every last ounce of milk, the cruelty of forcing out non-productive cows onto the street, and the violence against these abandoned 'strays', where they survive consuming toxic plastics from urban garbage heaps, resulting in painful deaths. Narayanan brilliantly discusses how Hindu culture and its myths of Kamadhenu – the mythological cow with her exhaustless udder and streams of pure, heavenly milk, worshipped and revered as mother, seamlessly masks the reality of the living dairy cow's motherhood – with her starving calf straining to reach her full udder.

Narayanan moves to the sites of protection where in chapter 4 she unpacks how gaushalas are actually sanctuaries for the cow-mother-nation, where the body of the dairy cow which invariably in gaushalas, is the indigenous cow breed (as gaushalas reject Jerseys and Holstein cows), is above all a Hindu State. A piercing example she describes is the cruelty of intensive dairy production being protected and supported in the name of devotion via Hindu rituals and belief systems where dairy farmers, most of them small scale, donate their discarded male calves to temples. The act of this being an offering to god, allows them to assuage their conscience of separating calves from their mothers, and the inevitability of slaughter that awaits the calf, as they can leave the fate or karma of the calf ' to god'. She describes how the top brass of temples and gaushalas, as also Hindu milk consumer-devotees, who are in complete denial about the dairy-bovine slaughter continuum, can excuse themselves from having anything to do with violence against bovines, and can target the slaughter end of milk production as the 'cruel act' of Muslims and Dalits.

Chapter 5 probes gaurakshaks and cow vigilante groups, revealing how their total belief in acts of violence to protect cows is rooted in their unwavering belief that cow is mother for

Hindus. Narayanan is spot on when she writes how 'The objectification of female and feminized Hindu bodies as mothering bodies, whether human, cows, or the physical / metaphorical landscape of Mother India, is a crux upon which Hindutva is founded. The erasure of bodily autonomy endured by Human female humans, becomes mapped onto the 'dairy' cows and onto the concept of Mother India.' Hindutva is driven by the idea that this feminised multispecies landscape of Hindu 'mothers, sisters, daughters and cows' must be protected by Hindu men, from 'the Muslim' who is a potential 'rapist' and cow slaughterer.

Hindutva employs the same gendered entity to racialise Muslims as beef eaters and rapists who violate Hindu cows and Hindu women, and are thus treated as the primary threat to 'Hindu men's' property, where the trauma of violation to women and cows, is less than the trauma that this violation presents to the men's sense of honour. This perceived Hindutva 'dishonour' to a Hindu male justifies for the Hindu right the violence they perpetrate against marginalised Muslims and Dalits, employed in the slaughter end of dairy production, as slaughter is framed as a moral offence to the milk-consuming and cow-loving Hindu and cow worshipping Hindu State.

Financial security is another reason that lures young men to become gaurakshaks, and genuine love for animals is a reason for some. The right wing governments' use of science and technology to test and detect cow beef via mobile forensic labs has fuelled the lynching of Dalits and Muslims. Recognising the rise of beef festivals celebrated by Dalit student bodies and Muslim communities as a retaliation against Hindutva beef politicisation and Hinduism's politics of discrimination against Dalits, she argues for human rights and animal rights groups to 'acknowledge human and animal vulnerabilities as morally relevant, and work together respectively' for animal and subaltern human liberation.

The challenges faced by animal rights activists in under-resourced countries, their attempts to rescue and shelter animals, and the choices they have to make between overcrowded shelters, turning animals away or using them as milk or traction animals, is analysed herein. She flags how the movement in not having a unified politics for all animals, accompanied by inconsistent messaging often focusing only on cows, are indistinguishable from Hindu right-wing forces.

Chapters 6 details the brutality and suffocation during transportation, illegal trafficking and the butcher-vigilante-police informer networks that serve both cow transporters and cow vigilantes. Chapter 7 describes the horror chambers of animal slaughter, as animals await their death in industrial, municipal and backyard underground/illegal slaughter spaces. In these chapters she also vividly describes the brutalising impact this has on the humans who people the process, the majority of whom belong to Dalit, Muslim and oppressed OBC communities.

She concludes her book offering veganism and a vegan food economy as the alternative to animal-based food regimes, arguing this will at once (i) end all forms of violence and exploitation of animals, (ii) completely halt the environmental degradation resulting from animal-agriculture, (iii) contribute to climate resilience as it does away with methane from animals, (iv) ensure sustainable vegan food production as farmer livelihoods and (v) counter Brahminism and caste.

As a veterinary scientist and food sovereignty activist, who has spent the last 37 years of my professional life living and working with Adivasi, Dalit, Vimukta jati and other OBC and

Muslim landless, small and marginal food producers whose livelihoods vitally include and depend on animals, in rural and indigenous territories in the states of Telangana and Andhra Pradesh, and who has consistently critiqued the growth of capitalist animal-agriculture as also called out Brahminism and Hindu right-wing politics for their animal slaughter politics which ignore the logical continuum of dairying and beef, I commend Narayanan for her important exposé of the cruelty entrenched within industrialised capitalist Indian dairy animal-agriculture system and how it is advanced and supported by Hindutva bovine politics and the hypocrisy of Brahminism.

Where I differ deeply with her analysis is her uncritical and academically non-rigorous (or is it privileged bias) and crude lumping together of all forms of animal-agriculture as being essentially exploitative and based on a violent, cruel and dominating relationship between humans and animals. By tracing and locating the history of animal rearing to either its Vedic interpretations or the World Bank-shaped Operation flood Dairy Development Indian experience, she has completely undermined, dismissed and excluded the subaltern histories and powerful agency of non-industrialised, non-capitalist, non-extractivist and non-brahminical, animal rearing worldviews, livelihoods, food cultures and practices of caste oppressed Dalit-Bahujan-Muslim and Adivasi communities, and yes the loving relationships they have nurtured with their animals. These have evolved over generations, of careful selection, breeding (not the breeding she sees in modern day dairy farms), feeding, healing and caring of their animals and associated environments, to live well in specific ecologies, and for definite usages/purposes – a term Narayanan would undoubtedly interpret as embodied violence; and yet even up until as late as the early 1990s which heralded the onset of liberalisation and outright capitalist growth in India, nearly 70% of Indian milk markets were outside the realm of the organised and industrialising frontiers of dairying, and up until the early 1980s, 75% of energy in Indian farming came from draught animals.

Within these systems of animal rearing livelihoods, calves are not separated from their mothers; cows, buffaloes, pigs, goats, sheep, poultry, yak, camels are not subjected to the cruelty witnessed and discussed in factory farmed animals. Male animals breed naturally with females, and are not 'milked' for semen. Male calves are not starved and discarded as worthless, because they historically were the basis of food farming and transportation, and yes – adult males, and females which finally stopped calving, were also and always consumed as food. Meat was never consumed every day, but on special occasions.

Industrialising, capitalising and brahminising livestock policies in India beginning from the 1970s onwards, and fast-tracked since the past 30 years, have proactively and aggressively facilitated the 'specialisation' of production (dairying in bovines and meat in goats and sheep, for instance), displacing the holistic multifunctional 'non-mother cow' role of animals in people's livelihoods. What Narayanan overlooks is how the aggressive spurt in industrialisation and capitalisation of dairying post liberalisation displaced over five million small and marginal farmers from dairying between 2000 and 2016. As dairying specialised, industrialised and has got 'organised', the small farmers mostly Dalit-Bhaujan and Muslim, have been replaced by larger and larger specialised dairy farmers who are 'higher up' in the hierarchy of caste, and projections are that farm sizes will only increase with increased intensification. Unfortunately, animal rights activists, including Narayanan, will find any kind of utilitarian role of domesticated animals – even in their non-industrialised multifunctional forms – as providers of energy, draught, transportation, milk, meat, dung, urine, leather, grazers to control forest fires, and disperse seeds, as an act of anthropocentric violence.

In striving hard to make the case of a world free of animal agriculture being core to fighting caste and fascism, she attempts to downplay the importance of beef in Dalit cultures, attributing the assertions of beef as a mere response to Hindutva politics and to counter the wider landscape of discrimination. However, in doing so, she masks the reality of the rich, joyous and flavourful existence of beef as an intrinsic and proud presence in Dalit cultures, so powerfully and vividly captured for example in Yendluri Sudhakar's collection of tales Speaking Sandals , recently published in the English from its original Telugu.

Her proposal on veganism is full of rhetoric, and demonstrates complete ignorance of environmental, climatic and ecological realities – such as there are vast geographies of grasslands in India, which are most sustainably utilised for animal grazing, and have been subjected to huge environmental havoc and damage by attempts to raise 'trees' or farm these grasslands. Recent research has also revealed the significant role of animal grazing in climate mitigation. The energy role of domestic animals in farming and transportation will be critical in a world which is soon nearing peak oil. Her proposals of promoting cashew trees to make non-dairy 'cashew milk' is equally disturbing – as she is oblivious, for instance, to the violent destruction of forest shifting cultivation practices, caused by cashew plantations forcibly promoted on Adivasi territories, which brought food insecurity to Adivasi homes, and deprived their animals of grazing resources. Whilst she highlights how intensive dairying drains scarce water resources, she ignores a similar drain on water resources in drought prone California, which is milking water to grow almonds to produce vegan almond milk. She also then avoids completely the question of the centrality of meat and halal in Islamic cultures, and how this will be addressed by veganism.

10,000 years ago, wild sheep were domesticated by humans to meet human needs, and this history of domestication resulted in the creation of diverse domestic animals and intrinsic relationships between humans and animals. Several animal breeds across species have already disappeared in India with the emergence of exclusive product specialidation-based animal farming whether for only dairying or 'meat', pushed by industrial capitalist and brahminic animal agriculture policies. Veganism would mean the death of all domesticated animal species, as people would have no reason to rear animals any longer. The forces of industrialisation and capitalism, and in the case of India, Brahminism, have chosen not to pursue and invest in science and technology to develop ways in which animals can be slaughtered without them having to experience trauma, fear, stress and pain. Decriminalising slaughter is core to dismantling caste and challenge Brahminism; accompanied by de-growth and de-industrialising animal rearing policies, which nurture a return to multifunctional, decentralised and localised animal livelihoods, are together crucial to stop this violence against animals.

PCOS Awareness Month: Is dairy bad for PCOS?

SEP 16, 2023

https://dairynews7x7.com/pcos-awareness-month-is-dairy-bad-for-pcos/

Dairy is a staple part of many people's diets. But can these foods we love so much be making our PCOS worse? If you do an internet search for dairy, you will be sure to find conflicting viewpoints. Many women want to understand if avoiding dairy is required for hormonal balance and reversing PCOS. So, to answer all your questions, we turned to experts to know whether dairy is bad for a PCOS diet.

Answering the same, Dr Rekha Radhamony, an Ayurveda doctor took to Instagram to share

whether dairy is bad for PCOS. "If you have PCOS, is it okay to have dairy? Ayurvedically speaking, one of the reasons for PCOS is due to "Kapha Avrita Koshta", meaning there is increased kapha in the gastrointestinal tract," she said.

She further explained, "Any foods that can increase the Kapha, can exacerbate the condition. Milk is heavy and increases Kapha, so stay away from it or reduce the consumption as much as possible."

However, not all dairy is created equally, meaning some forms of milk are better for women with PCOS than others. As such, Dr Radhamony shared that while curd can increase kapha, buttermilk on the other hand with fat removed is amazing for improving kapha, so try to have it either for breakfast, lunch or dinner. "Cheese and paneer can be taken in moderation, but not every day. Ghee and freshly made butter can also be consumed, not because they reduce or increase kapha, but because they improve overall digestion," she added.

On the other hand, Dr Ritu Sethi, Dr Ritu Sethi, Associate Director, Max Hospital, Gurgaon and The Aura Speciality Clinic said, "The relationship between dairy consumption and PCOS is a topic of debate among researchers and healthcare professionals. While there is no definitive answer, some studies suggest that dairy products may have potential negative effects on PCOS symptoms, while others show no significant association. It is important to note that individual responses to dairy can vary, and what works for one person may not work for another."

Following are a few reasons why some experts believe dairy may have a negative impact on PCOS, according to the expert:

*Insulin resistance: PCOS is often associated with insulin resistance, a condition in which the body's cells become less responsive to the effects of insulin. Some studies have suggested that certain components of dairy, such as lactose and whey protein, may stimulate insulin production, potentially worsening insulin resistance.

*Hormonal imbalances: Dairy products, particularly those from conventionally raised cows, may contain hormones and growth factors that could influence hormonal balance in the body. This can potentially exacerbate the hormonal imbalances already present in PCOS.

*Inflammation: PCOS is associated with chronic low-grade inflammation in the body. Some research suggests that dairy consumption, particularly high-fat dairy, may contribute to inflammation due to its saturated fat content and the presence of certain proteins.

There are a few ways in which women with PCOS can include dairy in their diet. Explaining the same, Dr Kinjal Shah, DNB (Obstetrics & Gy-

necology), Consultant, Bhatia Hospital, Mumbai said that one can opt for low-fat or non-fat dairy products to reduce the intake of saturated fats. “This includes skim milk, low-fat yoghurt, and reduced-fat cheeses. These options provide the beneficial nutrients found in dairy without the added fat,” she informed.

Additionally, one can pay attention to their portion sizes when consuming dairy products, as they can contribute to your overall calorie intake. Stick to recommended serving sizes to ensure you’re not over consuming calories or carbohydrates, says Dr Shah.

But for dairy-avoiding women, Dr. Prasannalatha, Senior Gynaecologist & Obstetrician, Kamineni Hospitals, Hyderabad recommends finding suitable alternatives. “Consider dark leafy greens, tofu, almonds, and fortified plant-based milk for calcium; poultry, fish, legumes, and tofu for protein; fatty fish, chia seeds, flaxseeds, and walnuts for omega-3 fatty acids. Pair dairy with nutrient-dense foods like fruits, vegetables, whole grains, and lean proteins for balanced meals,” she said.

Global News

Farmer's chances to kill the terms 'oat and soy milk' are waning

SEP 29, 2023

https://dairynews7x7.com/dairy-farmers-are-running-out-of-chances-to-kill-the-terms-oat-milk-and-soy-milk/

WASHINGTON — Almond milk — not almond beverage, almond drink, or even almond juice — appears here to stay.

There's few issues in the food world that generate as much vitriol as the debate over what to call nut, oat, and other plant-based alternatives to cow's milk.

Dairy farmers and their advocates for years have tried everything to convince regulators companies like Silk and Oatly shouldn't be able to slap "the m word" on their products. Actress Aubrey Plaza starred in a commercial sarcastically plugging the launch of a new fictitious product dubbed "Wood Milk." State legislators from Oklahoma and North Carolina to Virginia and Maryland have introduced bills banning these products from being called milk.

Rep. Mike Simpson (R-Idaho), a vocal dairy advocate in Congress, has even walked around grocery stores placing "This is not milk" sticky notes on cartons of plant-based drinks, he told STAT.

For dairy advocates, the issue is simple. Milk comes from a lactating mammal, and as former FDA Commissioner Scott Gottlieb once said, "an almond doesn't lactate."

"If you were able to extract liquid from a brick, would you be able to call that milk?" asked Sen. Peter Welch (D-Vt.) in an interview with STAT. "Milk is milk."

But the Food and Drug Administration released a draft policy earlier this year allowing plant-based companies to use "milk." Regulators cited their own research showing that most consumers aren't being duped into buying plant-based products, but instead seek them out voluntarily.

The dairy industry's multi-year campaign? "It really hasn't worked," said Stephen Ostroff, a former Deputy Commissioner for Foods and Veterinary Medicine at the FDA.

The entire fight is a window into the ways food companies use nutrition policy to impact their bottom line. In fact, the fight over the labeling of plant-based products is just one way in which the milk industry has tried to use nutrition policy to hamper the business of their competitors. Dairy companies have also opposed efforts to include plant-based alternatives in the public assistance program WIC.

"It's up to the dairy industry to go out there and promote the benefits of their products, not try to drag the other guy off the market — that's the far more effective strategy," added Ostroff.

The dairy industry's one last shot to change the labeling of these products, if it can't convince the FDA to completely abandon its policy, likely rests with a massive agriculture bill that must pass in the coming months. Dairy-state lawmakers are trying to get language into that legislation, known colloquially as the Farm Bill, that would ban plant-based companies from using the word milk. But it's an uphill battle: Lawmakers have been pushing a similar legislative effort since 2017 to no avail, and if the bill does get signed into law, it's likely to be challenged in court.

Adding to the challenge: the dairy industry is also splintering on this very issue, making their pitch to lawmakers that much harder.

In an interview with STAT, a spokesperson for the National Milk Producers Federation put a positive spin on the FDA's latest move, highlighting a separate provision that recommends plant-based companies calling their products milk include a voluntary disclaimer that they are lower in certain nutrients than cow's milk.

"Yes, a lot of dairy farmers are livid that [plant-based products] can still use the term milk — we don't agree with that either — but we do think that the FDA has at least taken a step in our direction," said Alan Bjerga, the group's executive vice president of communications & industry relations.

"Remember the old truism: First they ignore you, then they laugh at you, then you fight them, then you win," Bjerga added. "We are in stage three right now."

Much of the motivation behind the dairy industry's campaign appears to be economic. Dairy consumption has been dropping for decades, while the plant-based milk industry has rapidly grown into a multi-billion dollar enterprise. While the dairy industry emphasizes its sales still dramatically outpace plant-based products, and that plant-based sales are floundering as of late, there's evidence that some people are replacing their cow's milk with plant-based alternatives.

But it's about more than just money. Family farms produce most of the dairy in the United States, according to the Department of Agriculture, and many of those farms are multi-generational.

"There's an element of pride here," said Welch, the Vermont senator. "They're entitled to the respect that the milk label has conveyed to them."

However, the dairy industry insists that the entire effort is meant to stop consumer deception.

Shortly after the FDA released its draft policy earlier this year, postcards from dairy farmers around the country began arriving at the agency's Rockville, Maryland office complex. In bright blue letters they demanded: "STOP MISLEADING LABELS."

"Consumers are confused by the misuse of the word 'milk' on imitation beverages. They should not be misled into associating the nutritional profile of cow's milk, that is packed with 13 essential nutrients for growth including calcium, potassium and protein, to the inferior nutritional content of these imitation products," the postcards stated.

It's true that dairy and plant-based milks are very different nutritionally. Cow milk generally has higher levels of protein than plant-based milk, which generally also has fewer calories and saturated fat. Some plant-based milks have more potassium and calcium than cow's milk, others do not.

The dairy industry points to a number of studies showing that a portion of consumers purchasing plant-based products believed they contain cows milk, and that consumers of these products also often believe they have "the same or more" vitamins, protein, and minerals like calcium and potassium.

But the FDA commissioned its own focus groups in 2019 that found that while consumers "do not understand the nutritional differences between milk and plant-based milk alternatives," they don't believe the products contain dairy milk. That finding convinced the FDA that blocking plant-based products from calling themselves milk wasn't necessary.

The dairy industry's last shot to crack down on plant-based products likely rests with lawmakers, who have introduced a bill to ban plant-based products from calling themselves milks. The lead sponsors of that bill in the House and Senate confirmed to STAT they are pushing to get that legislation signed in the coming months as part of the farm bill reauthorization.

Though Congress is talking about a legislative ban on "milk," the effort is in early stages.

Simpson, one of the lead sponsor of the House effort, told STAT he hadn't had any conversation with the Agriculture Committee yet, which controls the process for passing the farm bill.

And while the chairman of that committee, GT Thompson, is himself from a family of dairy farmers and disagrees with the FDA's policy decision, he sounded doubtful about his panel's jurisdiction over the issue in a recent conversation with STAT, since FDA policy is not typically in the jurisdiction of his committee.

And not everyone in the dairy industry is actively pushing that bill, which is known as the Dairy Pride Act. One of the lobbies representing the dairy industry, the International Dairy Foods Association, is sitting on the sidelines. Some of its member companies, such as Danone, the company behind brands like Dannon and Activia yogurt, have recently added plant-based milk products to their lines. Danone now owns the Silk and So Delicious brands, too, and supports the FDA's decision to allow the use of the word "milk." An IDFA spokesperson told STAT that its members companies' varied positions on the issue did not influence its decision not to lobby on the bill.

If the bill becomes law, it also will almost certainly be challenged in court. Both plant-based and dairy-industry lawyers said it would be difficult to defend it. That's because the government can only limit so-called commercial speech if it has a "compelling interest" to do so. Preventing consumer deception could be considered one, but the government already has its own research calling into question just how deceptive the terminology is.

"It's a law that says you can't say this because it's misleading, but the government has data showing it's not misleading," said Madeline Cohen, senior regulatory attorney at the Good Food Institute which advocates for plant-based products.

Faced with the fact that almond, oat, and soy milk will likely contain the word milk on their labels for the foreseeable future, the dairy industry has begun a new tactic: Trolling.

Lobbying groups have taken to shaming plant-based milk companies into complying with the FDA's suggestion that they include a statement on their label disclosing that their products are lower in certain nutrients than cow's milk. The National Milk Producers Federation recently went to grocery stores to photograph current plant-based milk labels. In a blog post, it argued that labels on products like Ripple pea milk "illustrates just how out of hand unchecked marketing claims have become — and why FDA shouldn't hesitate in bringing it under control."

The Plant Based Foods Association, meanwhile, has threatened to sue FDA over the recommendation about disclosing nutritional value compared to milk. They say the policy is unprecedented, unnecessary, and would unfairly dissuade consumers from buying their products because the disclosures "point out to consumers nine ways in which cow's milk may, subjectively, be more nutritious than plant-based milks and none of the ways in which plant-based milks [may be] more nutritious than cow's milk."

There's also been no shortage of mocking the proliferation of products now being used to create plant-based milk.

In addition to the commercial starring Plaza, the California Milk Processor Board has created its own ad featuring depictions of salmon milk, cranberry milk, and noodle milk.

The video, to the tune of "If you're happy and you know it," ends with: "Everybody wants to be milk. It remains the undefeated real healthy tasty beverage champion."

Dairy industry and the untapped potential in Bangladesh

SEP 27, 2023

https://dairynews7x7.com/dairy-industry-and-the-untapped-potential-in-bangladesh/

Although dairy as an industry did not have any organised footing in Bangladesh until recently, its emergence

and growth over the decades is by all means commendable. From a very humble beginning in an informal manner, the industry grew to a large size thanks to a number of dedicated entrepreneurs backed by large-scale investment and introduction of modern technology. Reports published in the media often highlight the potential of the expanding industry, while also mentioning the lack of processing as a major hurdle to further expansion. Also, poor monitoring of quality control and pricing, and absence of institutional farming are believed to be instrumental in its struggle to thrive.

According to the Department of Livestock Services, milk production in Bangladesh amounted to 119.85 lakh tonnes in the 2020-21 fiscal year against the demand for 152.02 lakh tonnes. The deficit in production is met by bulk imports of milk powder, mainly from Australia, New Zealand, Holland, Denmark and Poland. According to Bangladesh Bank data, the country imported more than one lakh tonnes of milk powder and dairy derivatives spending Tk 2,000 crore in 2021.

Despite the huge demand and growth potential, the advancement of the industry is impeded by several challenges in the ecosystem. The informal segment of the industry is dominated by small-scale farmers and intermediaries, so quality control processes are apparently non-existent. As a result, the quality of milk is not being ensured.

The overwhelming reliance on imported milk products, particularly milk powder, is ever growing in the absence of processing facilities, and due to, what many think import bias. There can be no arguing that import is the only choice for the domestic market because of high demand, and absence of local processing makes import inevitable.

Many companies in the processing industry, like sweetmeat and ice-cream producers, use imported bulk milk powder for its low cost. According to a survey, the size of Bangladesh's milk market is $2.47 billion which is expected to grow over 5.0 per cent annually in the coming years. However, the fact remains that the country's dairy market is dominated by unprocessed, raw milk, and the processed segment is dominated by imported powdered milk. As for other milk products like butter, cheese, yogurt etc, a major portion of the demand is met from import.

Milk is a valuable nutritious food that has a short shelf life and requires careful handling. Milk is highly perishable because it is an excellent medium for the growth of microorganisms, particularly bacterial pathogens that can cause spoilage and disease in consumers. Milk processing allows the preservation of milk for days, weeks or months and helps reduce foodborne illness.

The usable life of milk can be extended for several days. Of these, pasteurisation is a heat treatment process that extends the usable life of milk and reduces the numbers of possible pathogenic microorganisms to levels at which they do not represent any health hazard. Milk can be processed further to convert it into high-value, concentrated and easily transportable dairy products with long shelf-life, such as butter, cheese and ghee.

Processing of dairy products gives small-scale dairy producers higher income than selling raw milk and offers better opportunities to reach regional and urban markets. Milk processing can also help deal with seasonal fluctuations in milk supply. The transformation of raw milk into processed milk and products can benefit entire communities by generating off-farm jobs in milk collection, transportation, processing and marketing.

While most countries produce their own milk products, the structure of the dairy industry varies in different parts of the world. In major milk-producing countries most milk is distributed through wholesale markets. In Ireland and Australia, for example, farmers' cooperatives own many of the large-scale processors, while in the United States many farmers and processors run their business through individual contracts. In developing countries, the past practice of farmers marketing milk in their own neighbourhoods is changing rapidly. Notable developments include considerable foreign investment in the dairy industry and a growing role for dairy cooperatives. Output of milk is growing rapidly in such countries and presents a major source of income growth for many farmers.

As in many other branches of the food industry, dairy processing in the major dairy producing countries has become increasingly concentrated, with fewer but larger and more efficient plants. This is notably the case in the United States, Europe, Australia and New Zealand.

Although in Bangladesh dairy is still a nascent industry operated largely informally, over the years it has experienced considerable change in procuring high milk-yielding cows, introduction of semi-mechanised milking techniques. But the supply chain is far from organised. Since there are only a few processing plants which procure fresh milk from the farmers, pricing, albeit low pricing, is often a disheartening aspect affecting farmers. There are a few cooperatives in the northern region of the country, but it is a tough task for them to ensure fair price because of lack of bargaining power.

As the dairy industry in the country is getting more and more organised and modern tech-based farms are also coming up with sizable investments, production of raw milk must not be the only objective. While there will always be demand for raw milk among a section of the consumers, pasteurisation, to start with, can be a viable option for accessing a better and bigger market. But this has to be done by a third party with big investment. Observers believe that despite the capital-intensive nature of investment, prospect for such venture is very bright. Next comes investment in other product areas such as yoghurt, butter, cheese etc. Investment in milk processing has hardly ever figured as a subject of importance in the country — for strange reasons. Isn't it time the dairy industry received the right boost by way of investment in processing?

According to experts, for the industry to grow in a desired manner, the focus should be more broad-based and diversity-oriented to cater to demands that are largely met from imports.

Producing power from cow poop: A Florida dairy aims to reduce climate impact of cattle

SEP 26, 2023
https://dairynews7x7.com/producing-power-from-cow-poop-a-florida-dairy-aims-to-reduce-climate-impact-of-cattle/

At barn No. 5 at the Larson Dairy farm just north of Lake Okeechobee, a line of cows pump out milk bound for grocery stores shelves and family refrigerators across Florida. Being cows, they are also producing a steady supply of something else — manure, a lot of it. Poop is an inevitable by-product of the cattle industry and, like cow burps and farts, it emits methane, a potent greenhouse gas that scientists point to as a major driver of climate change. But an innovative process now in operation at Larson helps reduce the climate impact of this dairy herd, capturing and cleaning methane locked in those cowpies and sending it to a natural gas pipeline near the farm.

Environmentalists and climate change experts, who have long criticized the cattle industry over pollution problems, have plenty of questions and concerns about the process. But the end result is something that Jacob Larson, a third-generation Florida farmer, sees as a big step forward he could not imagine possible a few years ago: His dairy waste supplements the state's energy supply and can perhaps even become a valuable product of its own.

"Just the thought process of turning manure into fuel is mind-boggling," said Larson, during a tour of the dairy's poop-to-power system, which emerged through a partnership with Brightmark, a waste-to-energy company based in California that has picked up much of the tab for installing and operating the equipment.

TURNING POOP INTO POWER

Since the source of this power is cow poop, the process itself is not particularly pretty. In the dairy barn, a spray system regularly wets down the manure with water to liquefy it, creating a brown stream that flows down a ditch into a concrete reservoir. From there, pipes take it into the heart of the system, something called an "anaerobic digester" lagoon. The system appears relatively low-tech. From above, a digester consists of large black tarps spread over what looks like a mound. But underneath, it functions like an insulated, oxygen-free underground bunker. Manure goes through four chemical reactions as bacteria feed on it. Depending on the temperature and amount of nutrients in the manure, Brightmark says it can take days to weeks for "bio-gas" to form, cleaned and processed. The company delivered its first bio-gas to a nearby pipeline in August.

Anaerobic digesters are in place on four of Larson's sprawling farms, fed by a steady supply of manure from some 12,000 cows. The poop-to-power calculation is complicated but by one expert estimate, 10 of the cows at barn No. 5 can produce enough bio-gas in a month to run a typical home over the same period. "The Larsons take care of cows and produce high-quality cows and high-quality manure," Larson said.

"We commit our manure supply to Brightmark, and they take the manure supply from there."

After processing, what's left of the manure is run through a rotating composter that squeezes out water and remaining solids. The dried leftovers, stored in piles, and the remaining liquid are used as fertilizer on the farm. "It's like recycling, that's the beauty," said Rishi Prasad, an environmental science professor at Auburn University who is not affiliated with Brightmark but has studied the process involved. "You are basically recycling manure on the farm for energy, for feeding the plants like corn, and then that corn would go back to feeding the dairy cows."

THE METHANE CHALLENGE

Livestock operations, according to a United Nations assessment, account for about a third of all global methane emissions — with cows far and away the No. 1 source. Methane is a particularly problematic greenhouse gas — its warming effect some 28 times greater than carbon dioxide on a 100-year timescale, and more than 80 times more powerful over 20 years, according to the U.S. Environmental Protection Agency.

So reducing methane emissions could make a big difference and is one of the major challenges of curbing climate change. While some activists call for banning or shrinking the cattle industry, that goal hasn't won much political or public support. "The whole planet is not going to stop eating beef, or stop drinking milk or stop eating pizzas," said Prasad, who studied anaerobic digesters as part of his pHd research at the University of Florida. "But we need to think about how we can make the food production industry more sustainable and reduce emissions so we can buy more time."

California, where Brightmark is based, already has embraced the use of digesters and fueled expansion through a state policy called the Low Carbon Fuel Standard (LCFS) intended to reduce the impact of transportation fuels. Under the complex rules, California views digesters as "carbon-negative" so bio-fuel can be used as a "credit" to balance out fossil fuels in a commercial trading market. It works this way. While there are no caps on emissions from dairy farms, oil and gas companies have strict limits on emissions produced by transportation fuel. To stay within emissions limits, those companies can either sell fuel with a lower carbon footprint or offset its use.

So at dairy farms, owners of the digesters can sell "carbon-negative" fuel to oil and gas companies like Chevron, which partnered with Brightmark — a transaction that helps offset its own emissions in the California system. Because digesters receive credit both for reducing methane emissions from manure and replacing a fossil fuel, dairy bio-gas is a particularly attractive commodity in the California market, 10 times more valuable than landfill gas.

Brightmark sees a promising future in Florida, where digesters also have been catching on. According to EPA's database, as of May 2022, there were about 330 anaerobic digesters at livestock farms in the U.S. and over 30 in Florida. Larson Family Farms isn't included on the list yet. The EPA also sees room for growth in Florida, with one report projecting up to 80 dairy farms as candidates. "The mission for us is to re-imagine waste and really look at better ways to create environmental benefits associated with the things that we waste," Bob Powell, CEO of Brightmark, said in an interview with the Miami Herald. "I definitely think the project with the Larsons is a flagship project and one that people can point to."

Brightmark, Larson and other supporters see the systems as a win-win. Bio-gas creates a new use, and potential revenue stream, from a former waste product. "We're going to be offsetting on an annual basis 57,000 tons of CO2 equivalent out of the environment," Powell said. "And to put that in perspective, that would be the equivalent of planting over 75,000 acres of forest each year."

NOT A CURE FOR CLIMATE IMPACTS

But the systems also are not silver bullets and even some supporters say that labeling them "carbon negative" oversells the benefits. "I don't think this falls under a carbon-negative scenario," said Prasad, the Auburn associate professor.

"But it is reducing the methane that goes back into the atmosphere by recycling it and not throwing it directly into the environment." Ruthie Lazenby, who focuses on energy law and policy at UCLA, said the anaerobic digesters also only deal with one part of the cow emissions problem. They don't process burps and passed gas, she wrote in a report supported by the United States Department of Agriculture.

"It is imperative that policymakers and others recognize that manure bio-gas systems reduce emissions from only one part of this system—manure management," Lazenby said in the report. Manure also happens to be the smallest part of the problem. While agriculture operations overall account for 10% of global greenhouse emissions, only 12% of that comes from manure, according to the EPA. In one study, scientists recorded up to 95% of cow's methane emissions came from burps and farts.

While the digesters can cut overall methane emissions from a dairy, she and others also worry whether selling bio-gas might actually encourage the expansion of a cattle industry that could potentially offset the benefits of manure-to-power systems. Lazenby believes the industry's operations need to be more closely regulated. "Embracing digesters is a profoundly pessimistic approach to greenhouse gas reduction and assumes that the best we can do is pay factory farms to capture a portion of their greenhouse gas emissions," she said. "Not only that, it invests in a technology that requires the ongoing production of those very greenhouse gasses."

A study from The Union of Concerned Scientists also showed that California's system gave a competitive financial advantage to large-scale dairy operations. The EPA, which has embraced digesters, also favors larger operations. In the screening document titled, "Is Anaerobic Digestion Right for Your Farm?" the second question asks how large the farm is and said potential candidates for digesters should have at least 500 cattle. One estimation calculated that each cow could bring in an extra $1,000 in revenue from carbon credits every year.

"On its face, using bio-gas to power homes and cars might be an attractive approach if you assume that these vehicles are going to be running anyway and this offers an opportunity to displace fossil fuels," said study author Kevin Fingerman, an associate professor of energy and climate at Calpoly Humboldt State University. "The complication emerges when we ask if there would be as much methane vented if we didn't have policy promotions for bio-gas." "By creating a new revenue stream, does that reinforce large-scale operations?" he said.

Climate impact also isn't the only concern — particularly in Florida, where environmental groups have long argued that cow manure is also a contributor to water pollution problems and algae blooms — and a major source of damaging nutrients flowing south into Lake Okeechobee. Brightmark believes the digesters will help reduce impacts there as well. In the past, manure would be disposed of in an open-air lagoon with greenhouse gasses vented into the atmosphere. "Because of the process creating a more stable fertilizer, it reduces phosphorus and nitrogen in the environment and it's allowed a dramatic water positive impact in our farming communities," Powell said. But Prasad and others are skeptical about how much of a difference a digester makes in reducing pollution impacts from fertilizer. "There is no such thing as a 'stable fertilizer' because it has nutrients," Prasad said.

"If you apply the digester's fertilizer throughout the season everything adds up and putting it in the same places for years can become a problem." The EPA also considers the leftover

material potentially problematic. “Digestate [the leftover solids and liquid] is a nutrient-rich by-product from organic waste anaerobic digestion but can contribute to nutrient pollution without comprehensive management strategies. Some nutrient pollution impacts include harmful algal blooms, hypoxia, and eutrophication.”

FOR ONE FARMER, A FAMILY LEGACY

Brightmark acknowledges that it has aspirations beyond the Larson farms. The company is also interested in developing larger operations, but says not every dairy farm it might contract with will wind up adding cows. “Brightmark is evaluating farms based on certain sizes,” said Ryan Berger, a partnership coordinator with Brightmark. “Sometimes it does work out to add more cows to that. We have a number of farms that we’ve worked with that have added cows. We have another set of farms that we work with that really haven’t grown.”

For Larson, his family’s goal is to continue a legacy in providing a staple product for Florida — but with reduced impact on the community and state he loves. “The hours are long, the work is hard and sometimes it’s dirty, but at the end of the day it’s pretty rewarding,” Larson said with a grin. “We feel a lot of responsibility. We’ve been blessed, and when much is given, much is required.

We do know that we have a lot to give back. One thing he does question is the contention from EPA and Brightmark that digesters can help reduce odors emanating from a dairy operation. Larson, who has been smelling cows his whole life, isn’t too sure about that. “I can’t say it smells much better.” Jacob Larson shows the stainless steel pipes that cools and filters the dairy cow’s milk. Larson learned to be a dairy farmer through the mentorship of his grandfather, who started the family business 75 years ago.

John Deere and DeLaval join hands for Sustainable Milk Production

SEP 25, 2023

https://dairynews7x7.com/john-deere-and-delaval-form-strategic-partnership-for-sustainable-milk-production/

John Deere and DeLaval have joined efforts to create the Milk Sustainability Center (MSC), a digital eco-system to help dairy farmers improve the efficiency and sustainability of their operations. The eco-system

will be open for partners to join, with the objective of providing farmers with data needed for a holistic view of the dairy operations.

Dairy farmers will use the Milk Sustainability Center to monitor nutrient use efficiency (NUE) for nitrogen, phosphorous, potassium, and carbon dioxide equivalent (CO2e), for their entire farm, specific fields, or their herd. The MSC will also provide data to allow dairy farmers to compare their performance to other dairy operations and identify key areas for improvement. MSC aims to serve dairy farmers independent of farm machinery brands and herd management software.

“Dairy farming is perhaps the most complex agriculture business today with no system integration between crop and animal performance. Dairy farmers often use five to seven different, non-connected software solutions to run their business,” said Dave Chipak, Director, Dairy & Livestock Production Systems at John Deere. “The MSC will enable dairy farmers to calculate, benchmark, simulate, and optimize NUE and CO2e for sustainable and profitable decision-making.”

After farmer authorization, data from DeLaval Plus and John Deere Operations Center will be automatically pulled into the Milk Sustainability Center. Manual data input will be reduced, ensuring high data quality, and ultimately helping an entire farm system – fields, cows, employees, advisors, machines, and other assets – work efficiently together.

MSC is cloud-based for desktop or mobile devices, built and powered by Dairy Data Warehouse BV (DDW), a Dutch based company in operation for the last 10 years offering data solutions for sustainable dairy. Dairy farmers, consultants, dealers, and other partners can also be invited to view their data in MSC.

“Dairy farmers are seeking ways to decrease their environmental footprint and improve sustainability,” said Lars Bergmann, Executive Vice President Digital Services at DeLaval. “The Milk Sustainability Center will help dairy farmers achieve their goals and address growing needs of dairy processors, retailers, government, and ultimately, consumers.”

The launch of the John Deere-DeLaval partnership will be a key focus in the John Deere booth at the AGRITECHNICA 2023 trade show, November 12-18, in Hanover, Germany.

The initial version of MSC will be released in Summer 2024 in North America and selected European Union countries and will be free of charge. A premium version with extended capabilities will be released at a later date.

Will the Dairy Economy Rebound by 2025?

SEP 24, 2023
https://dairynews7x7.com/will-the-dairy-economy-rebound-by-2025/

The dairy economy is in rough shape. This is what Ken Bailey, PhD shared with a group at the Dairy Financial and Risk Management Conference earlier this month in Harrisburg, Pa. Bailey has devoted his entire career to the economics of the U.S. and global dairy industries.

Bailey shared with the dairy audience that the Federal Reserve has tightened down on the economy, raising interest rates to cause enough of a strain to push towards a slowdown. He said that the U.S. dairy market is hampered by suppressed demand, both at home and abroad.

"The Conference Board forecasts that the growth seen in many parts of the economy will

gradually buckle under mounting headwinds later this year, leading to a very short and shallow recession," Bailey says. "This outlook is associated with numerous factors, including elevated inflation, high-interest rates, dissipating pandemic savings, lower government spending, and the resumption of mandatory student loan repayments. We forecast that real GDP growth will slow to 1.9% in 2023, and then fall to 0.5% in 2024."

The Federal Reserve's goal is for 2% inflation. Although, inflation posted its biggest monthly increase this year in August as consumers faced higher prices on energy and a variety of other items.

The consumer price index, which measures costs across a broad array of goods and services, rose a seasonally adjusted 0.6% for the month, and was up 3.7% from a year ago, the U.S. Department of Labor reported. The Wall Street Journal reports that mortgage interest rates hit 7.09%, the highest in 20 years and says that "would-be buyers are locked out and would-be sellers are staying put."

Slowed Demand in China

All of the above has caused the food price indexes calculated by the Food and Agriculture Organization of the United Nations (FAO) to decline in 2023. Bailey says that a decline in global demand is a major factor contributing to price decreases. In fact, global dairy prices have been declining since 2022. This is especially concerning, as China's economy is expected to slow. The U.S. Dairy Exporter blog reports that the U.S. low-protein whey exports to China dropped 21% year-to-date and that decline continued in July with exports falling 46% to the lowest monthly levels in 18 months.

The U.S. Dairy Exporter blog reports that "the fall in whey exports to China largely reflects weaker demand in the feed sector."

"There's a lot of other factors in China," Bailey says. "The bottom line is they're making a little bit more milk and their economy is slowing down. Their ability to buy dairy products has slowed now the U.S. isn't radically dependent on China dollars on cheese or the skim powder they buy."

U.S. Milk Production

When it comes to milk production in the U.S., Bailey reports that farm milk production for the first half of 2023 is even with a year ago. He

shares that “economics does not favor an expansion,” but says that component production continues to rise above year-ago levels.

“Demand is down, and farmers are delivering more than enough components to meet market needs,” he said.

Bailey shared that milk production has slowed down in response to summer heat and lower prices.

“Some of this milk production slowdown is being offset by high component levels,” he says.

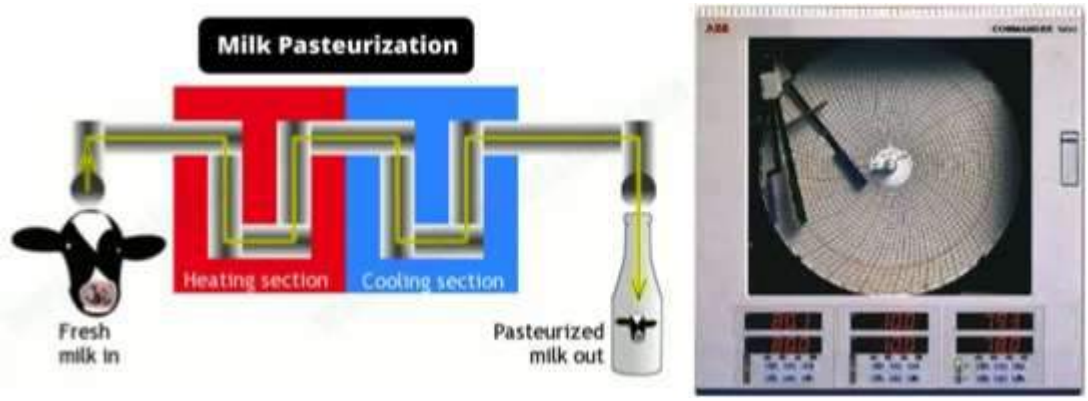
“Milk fat is increasingly ending up in cheese and butter production. Slower exports are overhanging the market, especially for dry protein. The EU is exporting more cheese and more butter to New Zealand. All of this is adding up to lower U.S. milk prices for the foreseeable future.”

The all-milk price has declined from $27 per cwt. in April 2023 to a low of $18 per cwt. by June.

“The all-milk price is forecast to reach $21 per cwt. by September 2023,” Bailey shared. “Higher prices will come when domestic and global demand resurges in 2025.”

Georgia dairy recalls milk due to incomplete pasteurization records

SEP 21, 2023
https://dairynews7x7.com/georgia-dairy-recalls-milk-because-of-incomplete-pasteurization-records/



Rock House Creamery Newborn, GA, has issued a voluntary recall for its whole milk and buttermilk.

“During a routine inspection conducted by the Georgia Department of Agriculture on Sept. 13, 2023, pasteurization records were found incomplete for select lots in September. Since these pasteurization charts are the primary record of pasteurization, Rock House Creamery is performing a voluntary recall,” according to the State Department.

“Drinking raw milk that has not undergone pasteurization to kill disease-causing germs can lead to serious illness.”

The affected products were distributed to Madison, Mansfield, Athens, Atlanta, and Milledgeville retailers. Consumers are strongly urged to dispose of any product remaining in their refrigerators.

Affected products include:

- Rock House Creamery whole milk with Best Buy dates of 9/10/2023,

9/17/2023, 9/20/2023, 9/24/2023, and 10/01/2023.

- Rock House Creamery buttermilk with a best buy date of 10/02/2023.

"The Georgia Department of Agriculture's Food Safety professionals work overtime to ensure the safety and security of our state's food supply, and we're grateful our team quickly identified and took action to correct this issue," said Agriculture Commissioner Tyler Harper.

There have been no illnesses reported to date. Rock House Creamery has identified the cause of the issue, and corrective actions have been taken to resolve the matter.

Fonterra's profit more than doubles on demand for dairy ingredients

SEP 21, 2023
https://dairynews7x7.com/fonterras-profit-more-than-doubles-on-demand-for-dairy-ingredients-shares-rise/

New Zealand's Fonterra Co-Operative Group (FCG.NZ) on Thursday reported a more than doubled annual profit on strong margins from its cheese and protein portfolio, and declared a higher final dividend, sending its shares higher.

The world's biggest dairy exporter also benefited from higher product pricing and strong demand for its dairy ingredients and foodservice channel.

The company reported a normalised profit after tax, excluding the one-off gain from divestments, of NZ$1.33 billion ($788.3 million) for the year ended July 31, compared with NZ$591 million a year ago.

Fonterra's shares climbed 3.9% by 0216 GMT and were set for their best day in six months, while the broader market (.NZ50) was down 0.2%.

Fonterra Shareholders' Fund (FSF.NZ) surged as much as 7.0% to its highest levels since May 2021.

But Fonterra had a challenging start to fiscal year 2024 as the company trimmed its farmgate milk price forecast for the season twice in August, driven by weakness in international dairy prices with lower demand from China, the world's top market for dairy imports.

"In the near term there's certainly been some headwinds (in China) despite the benefits we saw from the COVID-19 reopenings," Neil Beaumont, Fonterra chief financial officer told Reuters on Thursday.

The dairy giant also expects inflationary pressures and farmgate milk price outlook to impact its production levels.

Fonterra, however, said it expects to earn between 45 and 60 NZ cents per share from continuing operations in fiscal 2024, compared to normalized earnings of 80 NZ cents per share in fiscal 2023.

Beaumont said that increases in prices at recent global dairy trade auctions, the reemergence of Chinese buyers and the upgrade of the China-New Zealand Free Trade Agreement indicated demand for New Zealand milk powders might pick up from early next year.

The Auckland-based company declared a final dividend of 40 NZ cents per share, compared with 15 NZ cents last year.

($1 = 1.6872 New Zealand dollars

Welcome lift in global dairy prices, we're not out of the woods yet

SEP 21, 2023
https://dairynews7x7.com/welcome-lift-in-global-dairy-prices-but-were-not-out-of-the-woods-yet/

Whole milk powder prices gained 4.6% at the latest global auction but are 25% below the same time last year.

The price of whole milk powder, which has the most impact on farmgate milk prices, gained for a second global auction, a welcome relief for many dairy farmers who will be struggling to break even this season.

The average price for whole milk powder rose 4.6% to US$2799 (NZ$4620) a tonne at the Global Dairy Trade auction overnight, following a 5.3% gain at the previous fortnightly auction.

The overall GDT price index gained 4.6%, with anhydrous milk fat up 5.3%, butter up 3.8% and skim milk powder up 5.4%. Cheddar slipped 1.7%.

Global dairy prices have fallen sharply this season amid lacklustre demand from China, the world's biggest dairy importer and Fonterra's largest market for whole milk powder. Whole milk powder prices slumped 18% in August and are sitting 25% below the same time last year.

"These last couple of results are welcome," said Westpac senior agri economist Nathan Penny. "It makes it two decent auctions in a row so we'll definitely take it."

Still, Penny said he remained cautious as farmers headed into their peak milk production period.

"It's very early days in terms of have prices turned the corner or not," he said. "I'm still pretty cautious around the outlook."

Penny said he would want to see further price lifts over October and maybe into November to get confidence that dairy markets were through the downturn and out of the woods.

Westpac senior agri economist Nathan Penny says the lift in prices is welcome, but we're not out of the woods yet.

The two key factors influencing prices were Spring milk production and demand from China, he said.

Fonterra has forecast a 1.1% decline in its New Zealand milk collection this season to 1465 million kilograms of milk solids. The season started in June and production typically ramps up quickly and peaks in late October.

Wet and cold weather dented Spring production last season, although an improvement late in the season saw Fonterra's overall milk collection lift 0.2%.

"If we get normal weather, there's potential for better production this Spring," Penny said.

Still, he noted weaker milk prices this season were putting farmers under pressure and may see them pull back on buying extra feed which would constrain production.

"It's a little bit hard to see how that will play out," he said. "It could go either way over

Spring and over the season as a whole. It's still very early in the season."

As for Chinese demand, Penny said there hadn't been any material changes.

"We're still waiting for the Chinese economy to improve and for households to regain their mojo for that to drive prices higher," he said.

Penny said the recent gains in the global dairy market auctions may have been driven by low prices generating some demand.

"It's welcomed, but not necessarily a signal that things are going to kick on from here," he said. "What we need to see for that to happen is for demand to actually improve itself, rather than be generated by low prices."

How is the 'farmgate milk price' set?

Fonterra factors in fat and protein levels in milk when buying it off farmers.

Penny expects Fonterra to pay farmers $6.75 per kgMS for this season.

That's in line with the midpoint of Fonterra's own forecast, which spans a range of $6 to $7.50 per kgMS.

Dairy NZ has calculated an average breakeven milk price of $7.51 per kgMS for this season, which means many dairy farms will be unprofitable.

Fonterra is expected to finalise its farmgate milk price payment for last season when it releases its annual result on Thursday. The co-operative forecast a payment of $8.10 to $8.30 per kgMS, with a midpoint of $8.20 per kgMS.

Kantar Research observes 'Dano' as top dairy brand in Bangladesh

SEP 20, 2023
https://dairynews7x7.com/global-research-think-tank-observes-dano-as-top-dairy-brand-in-bangladesh/

Kantar World panel recently published its Bangladesh Brand Footprint 2023 report where survey results dictated "Dano" as the most chosen dairy brand in Bangladesh.

This further cements Dano's reputation as the most loved dairy brand in the country.

Dano is produced by Arla Foods Bangladesh, the local subsidiary of European dairy cooperative Arla Foods.

Commenting on the research outcome, Yashna Chowdhury, head of marketing at Arla Foods Bangladesh stated: "We at Arla Foods envision creating the future of dairy to bring health and inspiration to the world, naturally. This not only epitomizes our commitment to the dairy sector of the country but also inspires us in our journey of bringing accessible dairy goodness to the door steps of the people."

Kantar World panel is a globally renowned market research think-tank dealing in consumer knowledge and insights based on continuous consumer panels.

Brand Footprint is an annual publication by Kantar focusing on brand evolutions, market trends and shifting consumer behaviors.

This year's Bangladesh edition focused on rankings of top FMCG (Fast Moving Consumer Goods), food, beverage, dairy, personal care and home care brands in the country

Arla Foods Bangladesh Ltd has been operating in Bangladesh since 2014 along with its FSSC 22000 (V5.1) certified packaging facility located in Konabari, Gazipur.

Its portfolio currently includes Dano Power and Dano Daily Pushti, providing dairy nourishment and nutrition to millions every month.

Dano is the pioneering powdered milk brand in Bangladesh, bringing dairy goodness for generations from 1961.

It has also been awarded Best Brand Award by Bangladesh Brand Forum for 8 consecutive years.

How Sustainable is Animal-Free Dairy? We Compare Lab LCAs

SEP 20, 2023
https://dairynews7x7.com/how-sustainable-is-animal-free-dairy-we-compare-precision-fermentation-lcas/

Precision fermentation, described as the third pillar of alt-protein alongside plant-based and cultivated foods, is on the rise. There are at least 62 companies working in this space globally across the supply chain, with a big focus on animal-free dairy proteins. How does this sector stack up with conventional milk in terms of its climate credentials?

The precision fermentation sector has raised about $3.7B in total funding, with over $840M coming in just last year, according to industry think tank the Good Food Institute, which refers to it as the third pillar of alternative protein. It's a fast-growing sector – and one of its primary focuses is creating environmentally-friendlier alternatives to dairy.

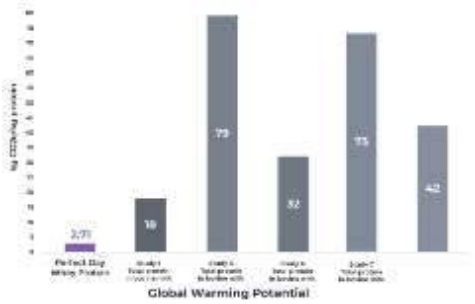
The technology has been around for over 30 years but came into the spotlight after alt-dairy startups like Perfect Day burst onto the scene. In terms of animal-free milk, precision fermentation involves producing molecular identical dairy proteins like casein or whey by encoding milk protein DNA sequences into microorganisms like yeast or fungi. These are then fermented with nutrients and sugar in tanks akin to those that use beer.

These microbes then produce proteins that are identical to traditional dairy proteins, which are then filtered into a pure milk protein isolate that can be used to create dairy products like cheese, yoghurt and ice cream without any animals. The animal welfare angle aside, there are numerous advantages of precision-fermented dairy, which is said to have a fraction of the carbon emissions and use much less land and water than conventional dairy.

While precision-fermented dairy makes up a fraction of the overall dairy sector, there is precedent for its future success. Insulin for diabetics used to be made from cow and pig pancreas, with the process requiring 50,000 slaughtered animals to produce just 1kg of the hormone. But now, 99% of the global insulin supply is made using precision fermentation. Meanwhile, 80% of the world's rennet – a crucial

ingredient for many cheeses that used to be exclusively sourced from the stomach lining of young cows and sheep – is made using this tech.

Perfect Day & Bon Vivant's precision fermentation LCAs



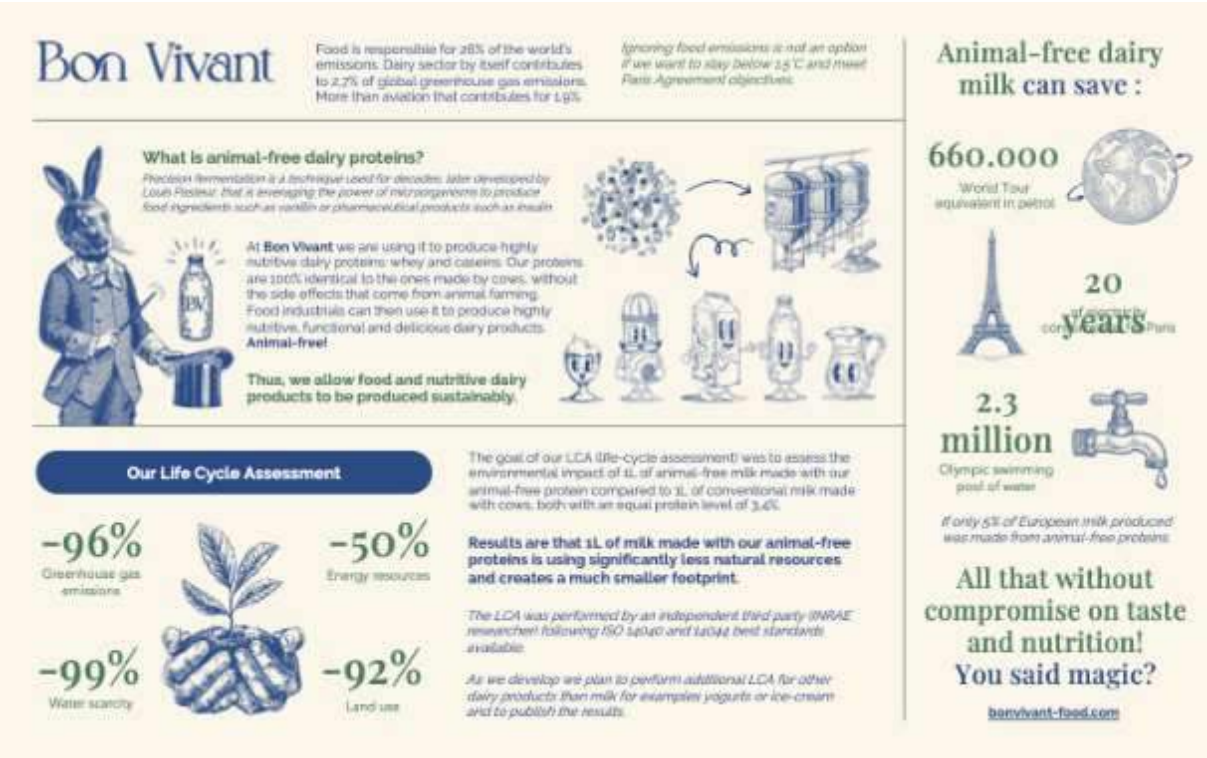
So how does the data stack up for alt-dairy? That's what certain companies and scientists have tried to measure. Perfect Day – the Californian precision fermentation dairy pioneer – is one of them, conducting a life cycle assessment (LCA) of its whey in 2021 to measure its ecological impact. The goal was to find out the greenhouse gas emissions, energy demand and water consumption of precision-fermented dairy, and how that compares with traditional bovine milk.

Perfect Day's ISO standard-reviewed LCA found that the company's animal-free whey has 91-97% lower greenhouse gas (GHG) emissions, 29-60% lower energy demands, and 96-99% of water consumption than conventional whey protein. To put this into context, if all Americans switched to its whey, it would save up to 246 million tons of CO_2e in emissions – that's equal to 28 million households' annual energy use (all New York and Californian homes combined), or up to 53 million passenger vehicles driven for a year (all the cars in New York, California, Texas and Florida combined).

Additionally, it would save the amount of water needed by 187 billion people for daily indoor home use. If the US continues its current consumption rate of traditional dairy, it would require 32% of the total lighting energy consumed by the country's residential and commercial sectors.

As for its own GHG emissions, the biggest factor is the utilities, accounting for 40% of Perfect Day's total emissions. The company says utilities are the largest contributor to GHG emissions, owing to the composition of the US electric grid, which primarily comprises coal (31%) and natural gas (33%).

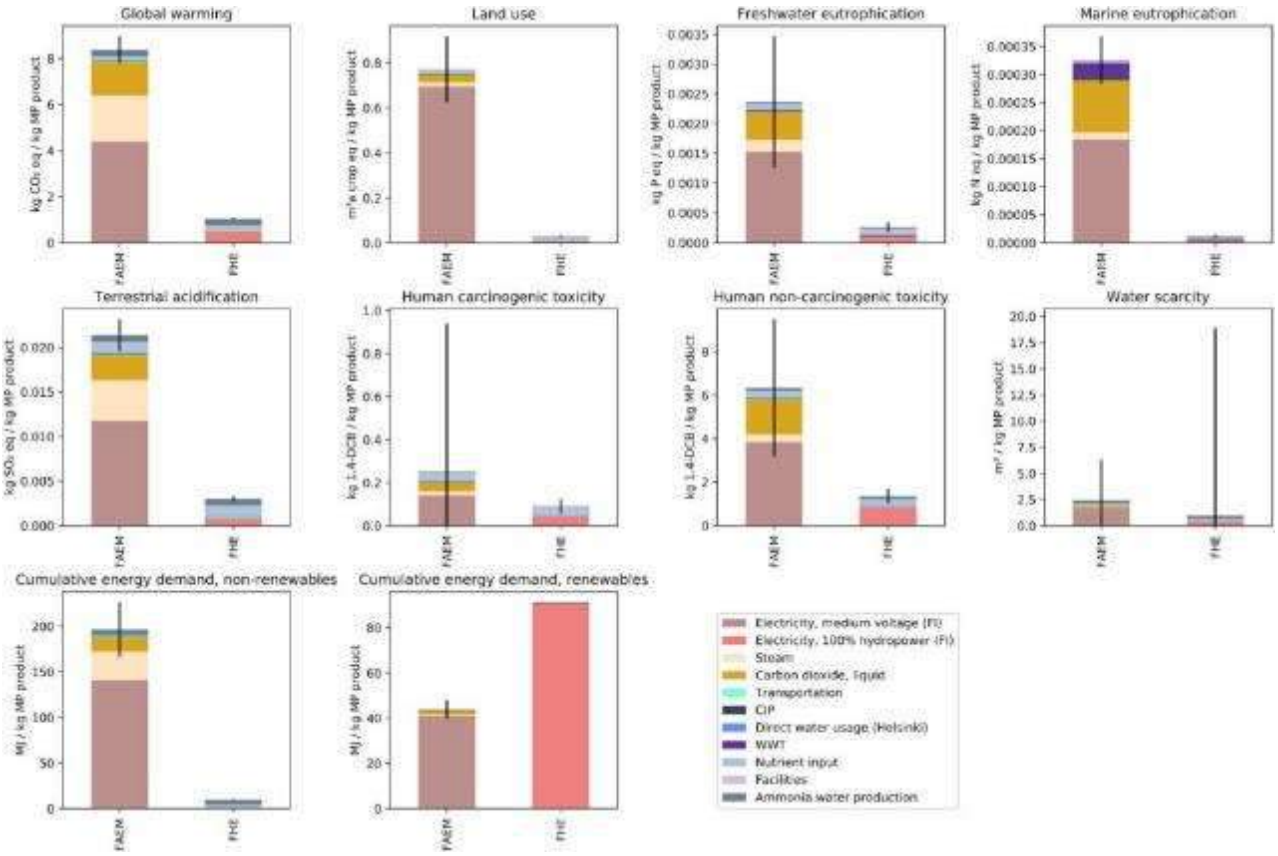
Developing its fermented protein makes up 25% of the emissions, many due to the production of glucose via starch hydrolysis (which is responsible for 83% of these protein development emissions). Utilities and glucose production are also the primary causes of energy and water use, respectively.



Across the Atlantic, French precision fermentation dairy producer Bon Vivant recently conducted its own LCA in 2022, which it says is the first of its kind in Europe. Similar to Perfect Day, the research was independently conducted according to ISO standards. The document, seen by Green Queen, showed similar results across multiple metrics – compared to conventional milk, it emits 96% less carbon and uses 99% less water 92% less land. In terms of energy use, Bon Vivant's precision-fermented dairy requires only half as much power as traditional dairy production.

The company says that if only 5% of European milk was animal-free, it would save the equivalent of 660,000 tours of the world in petrol, 20 years of electricity consumption in Paris, and 2.3 million Olympic swimming pools of water (note: we have not verified these numbers).

Independent scientific research LCA results



Using hydropower drastically reduces the environmental impact of precision fermentation proteins | Courtesy: ScienceDirect

However, non-company research carried out by scientists last year found that the environmental impact and water scarcity footprint of precision-fermented dairy are in the same range as dairy, with the main contributors being sugar and electricity production. The carbon footprints can be improved for both groups if renewable energy and food industry sidestreams are used.

Researchers noted that "the footprints of proteins and other food ingredients produced by cellular agriculture and traditional agriculture are not static – instead, there is potential for a significant reduction". As knowledge and tech related to precision fermentation evolves – and combines with renewable energy – its footprint could enhance "remarkably".

It's worth noting that the researchers said that a full LCA would provide a better picture, as they only assessed two metrics: emissions and water use.

Along these lines, an independent LCA focused on the different forms of energy used to produce all kinds of animal-free proteins from precision fermentation. Published in the journal ScienceDirect in 2021, it concluded that precision-fermented proteins had a 53-100% lower environmental impact than animal-based proteins.

It compared the production of microbial protein from regular energy sources and hydropower and found that using the latter led to a significantly better performance across all metrics. Land use was 25 times less, and global warming potential was eight times less per kg of protein. Using hydropower also had a substantially lower impact on eutrophication, acidification and human toxicity. These results echoed another precision-fermentation-focused LCA published a year earlier.

The ScienceDirect study stated that further research is needed to understand the wider climate impacts of replacing animal protein with precision-fermented alternatives, including changes in land use, energy generation and diets. “Ultimately, the environmental benefits gained through microbial protein will be determined by how much and what type of products consumers choose to replace with microbial protein,” the researchers concluded.

The differing results across the multiple LCAs could be attributed to a number of factors, including feed materials (whether it’s glucose or sucrose), energy sources and the use of renewable power, and the different ways to calculate water scarcity footprints, which can vary across regions and assessments.

Courtesy: Brave Robot

What do consumers think?

As of now, there are only a handful of consumer-facing precision fermentation brands, amongst them Modern Kitchen cream cheese, Brave Robot ice cream and Bored Cow milk – and most of these are exclusively available in the US. The average grocery shopper remains unaware of this technology, with researchers starting to canvas attitudes towards it and early results suggesting consumers are open to it.

In February 2022, the results of a joint study by German precision fermentation company Formo and the University of Bath found encouraging signs. The report highlighted a significant level of consumer enthusiasm and a strong curiosity about animal-free dairy amongst the 50 or so participants surveyed, including people from Germany, the UK, Singapore, and the US.

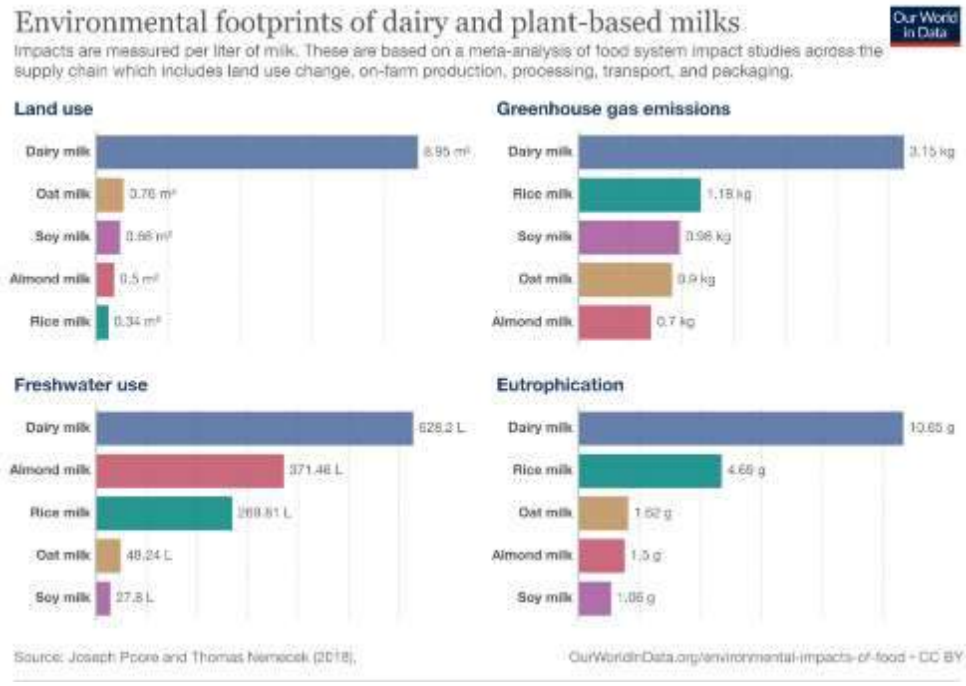
In March of this year, a white paper titled ‘Fermenting the Future: The Expanding Potential of Precision Fermentation in Product Manufacturing’ was published by the Hartman Group, Perfect Day and Cargill, delving into consumer sentiments regarding food technology, particularly focusing on precision fermentation. The research involved surveying over 2,500 adults in the US, and 77% of those who were familiar with precision fermentation expressed their likelihood to buy products derived from this tech.

One part of the puzzle is still up for debate: what should dairy products made via precision fermentation be called? A couple of years ago, it seemed animal-free dairy was the early industry consensus and Formo’s aforementioned report confirmed this was the preferred choice for the consumers surveyed, though other names like cell-cultured dairy, lab-grown dairy or microbial dairy are sometimes used by mainstream media. More recently, companies in the space have been exploring ‘whey protein from fermentation’, with Perfect Day CMO Allison Fowler telling AFN: “We’re seeing that for some consumers, ‘animal-free’ can sometimes be conflated with plant-based.”

Jason Rosenberg, head of business development at Israeli precision fermentation dairy company Remilk, told Green Queen in April that nomenclature is still very much a work in progress, and says that

further research is needed. “It’s not possible to have true consensus over complex topics like nomenclature without additional research and study. We all need to know more about this. Until we know more, it’s difficult to jump to a conclusion.”

What’s clear is that the industry needs to come together to ensure the best possible name is used to introduce this technology to mainstream consumers as more products enter the retail market The US-based Precision Fermentation Alliance (PFA) and Food Fermentation Europe (FFE) are a start. Both industry-led organizations have recently been formed to address such matters. As per PFA’s launch announcement, the alliance aims to “establish global transparency around ingredients and foods made with precision fermentation to build trust and familiarity among consumers…[and] educating and engaging key stakeholders throughout the food industry value chain, to establish best practices regarding regulatory, manufacturing, food safety, and communications standards and compliance”.



Comparing the environmental footprint of conventional dairy milk production with plant milk. Courtesy: Our World in Data

So, what’s the verdict? Precision fermentation dairy vs. conventional dairy

All the LCAs reviewed have consistent results, though with some variance: producing dairy proteins using precision fermentation is lower in GHG emissions than conventional dairy, particularly if the energy sources used were renewable. Meanwhile, dairy’s externalised costs go beyond GHG emissions: these include heavy antibiotic use in animals (which increases human superbug resistance risk), excess growth hormone use (which has been linked by researchers to a rise in certain cancers), land footprint, and animal cruelty (dairy cows are forcibly impregnated so they can keep on producing milk).

Water usage is a serious problem for the industry too. California is currently facing droughts and water shortages (and the US is running out of groundwater), with the state’s large dairy industry partially responsible. The latter accounts for more than its fair share of methane emissions too.

Precision fermentation dairy is undoubtedly an alternative to all of these issues. Given our growing global appetite for dairy products, especially in highly populated countries like China, and given that

livestock animal agriculture accounts for between 11% and 19% of all GHG emissions, it seems reasonable to continue investing in this alternative way to produce dairy proteins.

FrieslandCampina to reshape top structure to improve performance

SEP 20, 2023
https://dairynews7x7.com/frieslandcampina-to-reshape-top-structure-to-improve-business-performance/

FrieslandCampina has announced its intention to reshape its top structure, aiming to boost business performance and profitability. The change follows the appointment of Jan Derck van Karnebeek as CEO in June. The business will be divided in seven business groups and will be led by an Executive Team.

Starting in October, the new executive team will consist of 12 members, including seven presidents of the business groups and five functional leaders.

"The company's profitability is under pressure," highlights Jan Derck van Karnebeek, CEO at Royal FrieslandCampina.

"Therefore, in the coming period, we will take the necessary steps to improve profitability. The first step is to reshape our top structure and announce the corresponding appointments."

The announcement comes after Derck said earlier this year that 2023 has been "challenging." Low commodity dairy prices are putting pressure on the business' margins. According to the UN FAO, dairy prices are plummeting, declining 4% in July – the eighth consecutive monthly decline – and are now 22.4% lower than last year.

Additionally, the company says it faces higher expenses due to energy and raw material prices, labor costs, foreign exchange rates and interest rates.

Strategic moves

The company also revealed its plan to split up its current Food & Beverage business group into five separate business groups, each with its own characteristics and market strategies, effective January 2024.

FrieslandCampina will split up its current Food & Beverage business group into five separate business groups.The new business groups are

Europe, Retail & Americas, Middle East, Pakistan & Africa, Asia and Professional. The current business groups, Ingredients and Specialized Nutrition, will remain unchanged.

The company also stated that more clarity on its sharpened strategic direction, Expedition 2030, will be provided in October. Further details on organizational implications will be announced in the coming period.

Troubling times for sector

To optimize production and navigate the complex environment, FrieslandCampina announced job cuts earlier this year, planned for mid-2025.

FrieslandCampina also sold part of its German dairy operation to focus on high-performing brands.

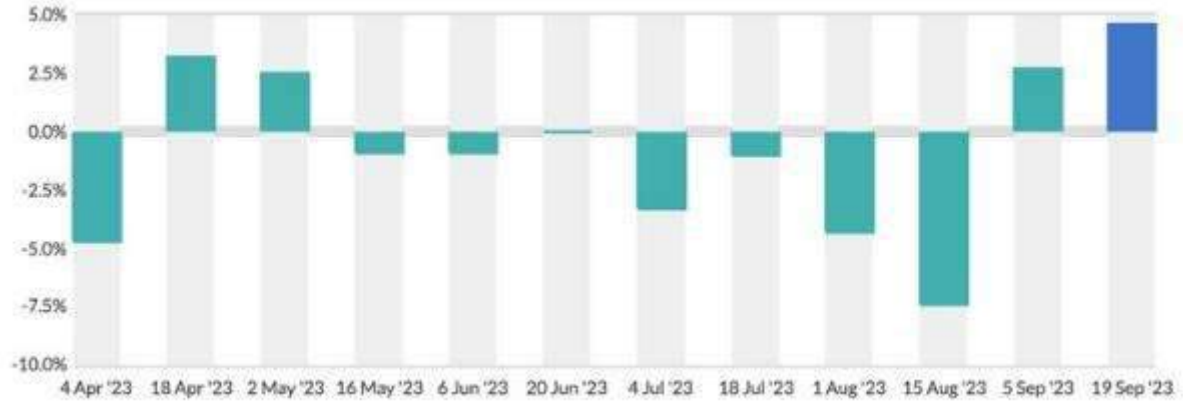
Danish dairy producer Arla Foods also recently noted that the European dairy category slowed down in 2022 and that revenue for butter suffered a decline.

"FrieslandCampina has a diversified business, product and customer portfolio, which enables it to spread its risks well and as a result, among other things, offer its member dairy farmers a leading milk price," Derck says.

"I am confident that with this new leadership team in place, we will fulfill FrieslandCampina's purpose of providing better nutrition for the world, a good living for our farmers, now and for generations to come," he concludes.

International milk prices rose while volumes dropped at GDT

SEP 20, 2023
https://dairynews7x7.com/international-milk-prices-rose-while-volumes-dropped-at-gdt/



The GDT Price Index was up 4.6%, with an average selling price of $2,957 per metric ton. The index rose 2.7% at the previous auction held on Sept. 5, with an average selling price of $2,888, according to GDT Events.

A total of 37,366 tons of dairy products were sold at the latest auction, down about 1% from the previous sale, the auction platform said.

The auction results could affect the New Zealand dollar as the dairy sector generates more than 7% of the nation's gross domestic product.

The New Zealand milk co-operative, which is owned by about 10,500 farmers, controls nearly a third of the world dairy trade.

GDT Events is owned by New Zealand's Fonterra Co-operative Group Ltd, but operates independently from the dairy giant.

U.S.-listed CRA International Inc is the trading manager for the Global Dairy Trade auction, which is held twice a month, with the next one scheduled for Oct. 3.

Dairy industry navigates global market challenges

SEP 18, 2023

https://dairynews7x7.com/dairy-industry-navigates-global-market-challenges/

Dairy Australia's September 2023 Situation and Outlook Report shows the industry is navigating a challenging global market, amidst strong farm gate milk prices and growth in retail value.

The report said lower export prices were a result of weakened global demand for dairy products, particularly from China.

Meanwhile, cost of living pressures continue to impact how consumers spend and, as a result, importers globally are buying substantially reduced volumes of product.

The bright spot for Australian dairy farmers is the strong farm gate milk prices set for this season.

Competition for milk among processors was fierce following the announcement of minimum milk prices at the start of June.

Despite a five per cent contraction in milk flows during the 2022-23 season due to weather, flooding, labour issues, resource competition and farm exits, growth was recorded in the final months.

As we transition to spring, the report said, the Australian milk pool is expected to see further year-on-year growth, recovering from last season's production dip due to flooding.

"Strong farm gate milk prices place Australian farmers in the best possible position as the industry faces challenges," Dairy Australia's industry analyst Eliza Redfern said.

"Australian farm gate milk prices run counter to trends in the global market," she said.

"New Zealand, in particular, has seen a rapid drop in milk prices, far below Australia's levels.

"Additionally, stiff competition of dairy products from New Zealand and the Northern Hemisphere being sold in Australia and internationally, presents a difficult landscape for Australian manufacturers to operate in."

Other global dairy exporting regions like New Zealand, the United States and Europe initially recorded production growth in 2023 but are now stabilising.

Variable weather conditions and declining herd numbers, along with tightening margins, are also factors at play.

The report said dairy had continued to deliver value growth in the retail sector and was a prominent product category for Australian retailers.

Dairy retail prices have increased at the fastest rate compared to all other food groups, with the total value of dairy products sold offsetting any declines in volume sold.

Fresh milk ranks third in total retail market value growth, closely followed by cheese in fourth place and yoghurt in ninth.

After a temporary easing in the first half of 2023, farm input costs are climbing again, the report said.

The Ukraine conflict has disrupted global fertiliser and grain trade, impacting Australia's market.

While global fertiliser prices have eased, Australian suppliers are facing growing demand, with reports of urea rationing.

Additionally, there are heightened risks and regional variations to the outlook for homegrown feed.

The yet-to-be-declared El Niño event could bring drier conditions, weighing on feed availability.

Overall, yields are expected to be average, supported by larger crop planted areas, but minimal feed price declines are anticipated.

The History of Margarine Can Teach Us About Plant-Based Battles

SEP 18, 2023
https://dairynews7x7.com/what-the-history-of-margarine-can-teach-us-about-current-plant-based-battles/

In recent years, the dairy industry has worked hard to hinder formidable competition from plant-based foods. The industry lobbied for legislation that would prevent companies from calling their plant-based dairy alternatives "milk" for instance, and petitioned the FDA to define milk as the product of "hooved animals." It also launched numerous marketing campaigns portraying plant-based milks as unnatural and unhealthy, while romanticizing dairy milk as the only truly nutritious and all-American beverage.

While these tensions, which pit traditional animal products against more humane alternatives, might seem like a product of the 21st century, they go all the way back to the 1870s, when a surge in the popularity of margarine prompted a heated battle over coloring, labeling, health and regulations that lasted almost a century.

Here's what the controversy around the so-called "demon spread" — aka margarine — can teach us about the current debates surrounding cultivated meats and other cruelty-free alternatives.

A Brief History of Margarine

Margarine — a creamy butter substitute made primarily from vegetable oils — was invented by the French chemist Hippolyte Mège-Mouriés in 1869 after a food shortage prompted the French government to offer a prize to anyone who could create a cheap and effective alternative to butter. Mège-Mouriés rose to the challenge, creating a product he christened "oleomargarine," which combined the Latin word for "olive oil" with the Greek word for "pearl." Margarine is essentially a water-in-fat emulsion made through the intensive processing of refined vegetable oil and water. Though margarine originally used beef tallow as its primary fat source, the discovery of hydrogenation in 1900 allowed for the substitution of vegetable oils for animal fat from that point forward.Play Video

Margarine was patented in New York in 1871, paving the way for the product's tremendous spread throughout the United States. In 1873, the Oleo Margarine Manufacturing Company opened in New York and quickly expanded to 37 plants across the country.

When margarine began hitting U.S. markets near the end of the 19th century, many consumers were already dissatisfied with the taste, quality and reliability of traditional butter. Butter was typically produced on small-scale farms, and the quality varied widely depending on the equipment, livestock and skill of the farmer. As historian Gerry Strey writes in Oleo Wars: Wisconsin's Fight Over the Demon Spread, "So bad was the overall quality of Wisconsin butter that in Chicago markets, it

was known as 'Western grease,' and was sold as a lubricant, not for human consumption."

Though margarine offered a cheap and consistent alternative to this "Western grease," it was initially met with some skepticism. Many consumers were turned off by margarine's natural pale white color, and worried that the spread was a "poor man's food" that they shouldn't be serving to their family and guests.

By the late 1880s, however, manufacturers began tinting margarine yellow to make it more closely resemble butter. Margarine ads touted the product as "made in the milky way" and "churned especially for lovers of good butter." Margarine quickly became a boon to consumers who saw little difference in taste or appearance, but liked the spread's consistent quality and cheaper price tag.

In 1881, 34 million pounds of margarine were sold in the United States. That number jumped to 126 million in 1902. The rise of margarine was so notable that one of the greatest novelists of the 19th century even had to comment upon it: In his 1883 memoir, Life on the Mississippi, Mark Twain describes overhearing an enthusiastic margarine salesman calling out, "You are going to see the day, pretty soon, when you can't find an ounce of butter to bless yourself with."

How the Dairy Industry Responded

Not surprisingly, the dairy industry did not react well to this novel competition. Margarine arrived on U.S. shores just as the dairy industry was transitioning from small-scale, local farms to large, industrialized operations concerned with maintaining their growth and cutting out competition.

With margarine threatening to usurp butter, the dairy industry launched a full-scale offensive, calling into question the health and quality of margarine and attempting to police the language used to promote it. Strey writes, "In the United States, emotions and social values combined with economic self-interest to create a visceral enmity towards margarine, which evolved into a long running attempt to suppress it."

In an 1890 cartoon from the Rural New Yorker, margarine is depicted as a monstrous three-headed hydra — one head for cottonseed oil, one for glucose and another for the general fraud that was oleomargarine — which farmers and townspeople had to rally around to defeat.

The dairy industry and its political allies attempted to stoke fears about the butter alternative, portraying margarine as a fraudulent abomination that was deceiving customers, harming their health and threatening a more traditional way of life. Governor Lucius Hubbard of Minnesota called "oleomargarine and its kindred abominations" a "mechanical mixture" made through "the ingenuity of depraved human genius." The industry claimed this lowly "imitation butter" was the product of tainted and unsanitary factory conditions, carefully ignoring the fact that butter was itself often sourced from cows living in crowded, filthy stables that bred disease. A satirical piece published in 1880 in Harper's Weekly joked, "Affrighted epicures are informed that they are eating their old candle-ends and tallow-dip remnants in the guise of butter."

Echoing strategies still employed today, the dairy industry began attempting to stifle plant-based dairy through regulation. It moved away from trying to change hearts and minds and instead went about trying to change state and federal legislation.

In a bold first step, New York banned margarine outright in 1884, though the New York Court of Appeals — New York's Supreme Court — quickly saw through the legislation and declared it unconstitutional, arguing that the New York law was nothing but a veiled attempt to protect the dairy industry from fair competition.

Wisconsin settled for intensive regulation, passing a law that made it illegal for margarine to call itself "butter" (sound familiar?) and even prohibiting restaurants and other businesses from substituting margarine in their establishments. The state later passed another law preventing the manufacture and sale of tinted margarine — requiring restaurants and hotels to post signage announcing they sold the spread on their premises.

Federal legislation came next. In 1886, President Grover Cleveland signed the Oleomargarine Act into law, which imposed labeling and packaging requirements on margarine — defined as anything "made in imitation or semblance of butter" — as well as hefty taxes and prohibitive licensing fees on manufactures. That week, Harper's Weekly published a cartoon showing a citizen knocking on the door of the U.S. Senate next to a sign that read, "Oleomargarine Bill Passed Both Sides of the House to Please the Dairy Men."

But the Dairy Men still weren't pleased. Throughout the final years of the 19th century, the industry continued to lobby for more extensive legislation that would effectively regulate margarine out of existence.

At that point in time, animal fat was still a major component of margarine, and ironically, anti-margarine campaigners zeroed in on the cruel conditions of the slaughterhouse to further demonize the product. In 1902, Senator Joseph Quarles of Wisconsin gave a passionate speech to the Senate, declaring, "I desire butter that comes from the dairy, not from the slaughterhouse. I want butter that has the natural aroma of life and health. I decline to accept as a substitute caul fat, manufactured under the chill of death, blended with vegetable oils and flavored by a chemical trick."

Of course, Quarles conveniently stayed silent on the brutality of dairy farms, instead romanticizing dairy as an all-American idyll in order to convince consumers that butter really was the superior product.

Quarles' argument lost some of its steam after the discovery of hydrogenation in 1900 made the use of beef tallow in margarine mostly a thing of the past. Nonetheless, the highly-contested Grout Bill passed Congress in 1902, mandating that margarine shipped from one state to another be subject to the laws of that state and imposing an onerous 10-cent tax on all colored margarine in the country. Most butter from corn-fed cows, which was typically pale-white like margarine, was also dyed yellow to meet consumer expectations, but the Grout Bill conveniently didn't think it was necessary to tax that.

By 1902, Maine, Michigan, Minnesota, Pennsylvania, Wisconsin and Ohio had all banned margarine. Other states, 32 in total, simply focused on making sure margarine didn't look like butter. Vermont, New Hampshire and South Dakota passed laws requiring margarine to be dyed pink; others wanted margarine to be red, brown or black. These so-called "pink laws" were overturned by the Supreme Court on the grounds that it was illegal to enforce the adulteration of food, but the Court still upheld bans on the sale of yellowed margarine.

Of course, people found ways to work around these restrictions. Companies started selling coloring packets with white margarine so consumers could tint their margarine themselves. In an odd precursor to prohibition, thriving bootlegging industries cropped up in the states where margarine was banned. Bootleggers in some states faced up to $6,000 in fines, but these provisions weren't heavily enforced, and the trade in outlaw margarine continued mostly unabated. In Wisconsin, consumers flocked to gas stations and shops on the border towns of Illinois to stock up on their prized counterfeit butter.

Did the Bans and Regulations Work?

Even in the face of federal restrictions and intense dairy industry opposition, margarine continued to thrive. Between the late 1920s

and 1950s, butter consumption in the U.S. declined by one-third while margarine sales quadrupled. Throughout the Great Depression, margarine remained cheaper than butter, becoming a staple of many cash-strapped pantries. Margarine consumption also increased during WWII, when rationing made the spread an even more appealing alternative. As margarine made its way into cookbooks like the Coupon Cookery in 1943, the butter substitute quickly lost its stigma as a "poor man's food." Eleanor Roosevelt even appeared in a commercial for Good Luck Margarine, claiming she liked to spread it on her toast every morning.

Soybean farmers and cottonseed oil farmers, especially those in Southern states, also benefited from the popularity of margarine, and they continued to press lawmakers in their states to repeal laws that kept margarine relegated to a second-class spread.

After the federal government finally repealed its margarine tax in 1950, many other states followed suit. By the 1960s, Minnesota and Wisconsin were the only holdouts. It took Wisconsin until 1967 to repeal its margarine ban, and it did so with some serious caveats. To this day in Wisconsin, restaurants are still forbidden from serving margarine instead of butter unless a customer specifically requests it.

Margarine in Decline…As Other Plant-Based Spreads Rise

According to recent statistics, butter may have taken back the reins. As of 2014, Americans are eating an average of 5.6 pounds of butter a year, compared to just 3.5 pounds of margarine. Still, brands like Blue Bonnet, Country Crock and I Can't Believe It's Not Butter are such a commonplace feature of the dairy aisle that it is hard to imagine a time when margarine was controversial.

Meanwhile, despite attempts by the dairy industry to squash plant-based alternatives, the rest of the plant-based butter market is on track to experience "exponential" growth by 2030, according to business analysts.

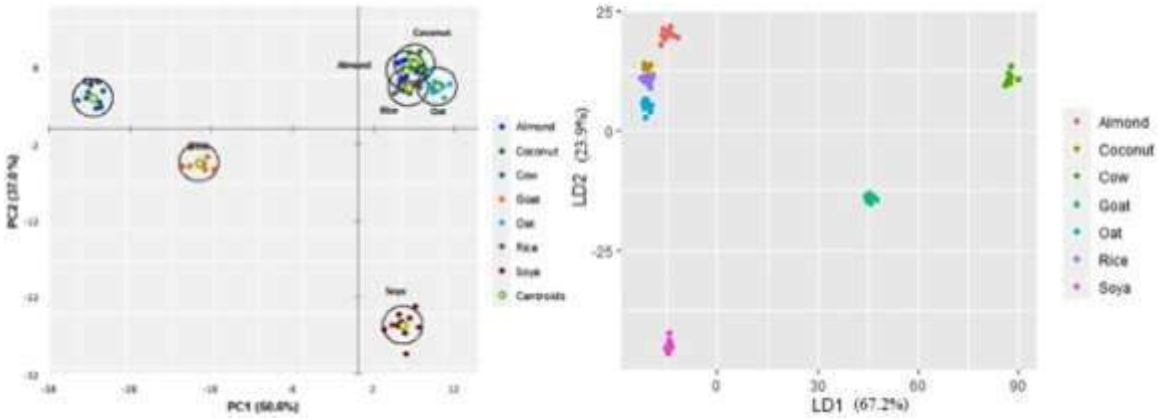
Likewise for plant-based milks — in spite of the dairy industry's various creative schemes to convince consumers that plant-based milks are fraudulent and unhealthy — almond, oat and soy are right at home next to dairy milks at grocery stores, and are only growing in popularity.

For what it's worth, the FDA thinks it's perfectly fine for plant-based milks to call themselves "milk," though the lawsuits meant to stifle plant-based companies will likely continue. While the threat of legal action may intimidate many plant-based companies from using perfectly legal language in the first place, at least when challenged, plant-based companies are winning: two federal judges in California dismissed class action lawsuits claiming that plant-based milks were deceiving customers.

Just as the dairy industry rallied against plant-based milks and margarine over the years, the meat industry is likely gearing up for a similar fight against cultivated proteins. But if the past has anything to teach us, it's that consumer choice will often prevail — especially when shoppers are offered more humane, environmentally friendly alternatives.

How animal milk and plant-based diverge in terms key nutrients

SEP 17, 2023
https://dairynews7x7.com/how-animal-milk-and-plant-based-alternatives-diverge-in-terms-of-fatty-acid-amino-acid-and-mineral-composition/



The decline in fresh milk in the Western world has in part been substituted by an increased consumption of plant-based beverages (PBB). These are often marketed as healthy and sustainable alternatives to milk and dairy foodstuff, although studies have suggested PBB to be of lower nutrient quality. The current study considered different brands of almond-, oat-, rice-, coconut- and soya-based beverages for a comparative analysis and found that they indeed presented lower contents of total protein, lipids, amino acids, and minerals than cow and goat milk. The only exception was given by soya-based beverages which approximated the protein content (3.47% vs. 3.42 and 3.25% in cow and goat milk, respectively) and amino acid composition of animal milk, and also demonstrated high mineral content. The natural presence of phyto-compounds in PBB characterised as antinutrients and their potential to exacerbate the issue of low nutrient quality by lowering bioavailability have been discussed.

Introduction

Dairy products have been historically important sources of nutrients particularly in the Western world and in certain Asian countries. Today their consumption is recommended in numerous national dietary guidelines for their high levels of essential nutrients including minerals, fatty acids (FA), and proteins1. Indeed, dairy provides 49% of global dietary calcium, 15% of dietary fat, and 12% of proteins2. Despite this, the consumption of animal milk is in decline in Europe and the U.S. In 2011 the per capita fresh milk consumption in the EU amounted to 56.3 kg, but a 14.6% decline has been projected between 2011 and 20313, translating into a decrease of 394 mL/year. In the U.S. the annual consumption per capita in 2021 was 62.31 kg for milk, 2.92 kg for butter, and 17.2 kg for cheese (ref. 4; https://www.clal.it/en/?section=tabs_consumi_procapite), but the milk intake has been declining by 830 mL/year since 19755. This decline has in part been replaced by a greater consumption of processed derivatives as well as plant-based beverages (PBB). These PBB are often marketed as healthier substitutes and are frequently, although improperly, referred to as “milk”. In Europe, the misuse of the term “milk” has led to the addition of the legally binding definition for milk in the Common Organisation of Markets Regulation (EU) No 1308/20136. The term “milk” has thereby been banned on PBB labelling since 2013 to prevent consumer misguidance.

The recent expansion of non-dairy alternatives has largely been driven by issues concerning lactose intolerance and milk protein allergies[7]. The growing prevalence of veganism, awareness of animal welfare, and the perceived idea of lower environmental impact and improved health has further encouraged the growth of PBB on the mainstream market[8]. The most popular PBB are of almond, oat, soya, cashew and coconut origin, or a mixture of these[9], but the innovative nature of this market allows for continues expansion of new products. As such, the nutritional content of PBB vary markedly depending on their plant origin, fortification, and industrial processing. Beyond the quantity of the major nutrients, i.e. lipids, carbohydrates, and proteins, the fractional profiles also greatly differ between animal milk and PBB, to which evidence suggest PBB to have a poorer nutritional profile[10]. Among micronutrients, PBB have demonstrated particularly poor in the mean content of the mineral I[10]. Iodine is a rate-limiting element for the synthesis of thyroid hormones that play a central role in growth and neurological development, especially in children[11]. Indeed, I deficiency represents the first preventable cause of brain damage worldwide and its recommended intake vary during lifespan[12]. Iodine is obtained almost exclusively from diets constituting seafood and dairy products as the main dietary components[13,14]. Salt iodisation and I fortification of common house-hold food products have therefore become frequent practices to avoid deficiency[15].

To address other common micronutrient deficiencies associated with vegan and vegetarian diets, and to thereby be considered as appropriate substitutes to bovine milk, many PBB are often fortified with other minerals beyond I as well as with vitamins, appealing to perceived consumer health benefits. However, despite the growing demand and capitalization of PBB, research into the nutritional aspects of these beverages remains limited, with the exception given by the culturally important soya, whose culinary use has been documented for centuries in many diverse countries. Such research, however, is commonly conducted based on the declared nutrition content on the packaging rather than on composition measurements of actual contents. Indeed, studies have shown nutrient composition declared on food packaging does not always align with actual contents[16,17]. As milk is, above all, a precious source of high-quality protein and minerals, and its substitution for PBB may thus promote deficiencies of these nutrients, the present study aimed to (i) quantify the gross composition and the amino acids, fatty acids, and minerals in different PBB and animal milk (Table 1), and (ii) carry out a comparative analysis to elucidate which PBB types approximate the nutritional profile of animal milk. The present study applied the detailed FA and amino acid composition as well as gross composition and mineral content of several PBB and milk to identify which nutritive components best discriminate between the beverage types.

Rs 31.25 Lakhs subsidy for setting up a 25 Desi cows dairy farm

SEP 17, 2023

https://dairynews7x7.com/rs-31-25-lakhs-subsidy-for-setting-up-a-25-desi-cows-dairy-farm-in-uttar-pradesh-yogi-adityanath/

This is the first channel dedicated to dairy-related news from India and abroad. It will cover top seven dairy news from last seven days. The news will be aired on every Sunday. The channel will have expert interviews, market and technical analysis and a lot more sections very soon. You may

share in comments about the news on which you would like to have detailed information. We shall be creating detailed news feature on the same. Top seven news from the last week are as follows :

1. Yogi govt announces 50% subsidy on dairy farm of 25 cows

2. Frictionless credit initiative slashes operational costs for lenders

3. Naidu's arrest drags Heritage Foods' shares down by 11%

4. Could LSD in UP lead to milk shortage in north during festival time?

5. Future of Animal Husbandry in India, Trends, And Growth

6. Supporters call on FDA to stop lab-grown dairy to use dairy terms

7. Pathways to dairy net zero-declaration

PATHWAYS TO DAIRY NET ZERO-DECLARATION

SEP 16, 2023

https://dairynews7x7.com/pathways-to-dairy-net-zero-declaration/

Across every dairy community. Throughout every continent. The global dairy sector is taking action.

Pathways to Dairy Net Zero, the first climate initiative of its kind in the world, will accelerate dairy's

climate action by reducing the sector's greenhouse gas (GHG) emissions over the next 30 years.
It is driven by the global dairy sector and supported by leading scientific and research organizations

AS A SUPPORTER OF PATHWAYS TO DAIRY NET ZERO, WE RECOGNIZE THAT:
Dairy helps create sustainable food systems, ensuring high-quality nutrition for all. There are opportunities for all to reduce greenhouse gas emissions because positive change is possible across all dairy systems and regions
As a short-lived greenhouse gas, reducing methane emissions from livestock can be part of a climate
solution. Dairy already has the means in many regions to reduce a significant proportion of emissions by
improving productivity and resource use efficiency. Reducing emissions today will safeguard nutrition
security, sustain a billion livelihoods for tomorrow and help secure a future for us all

WE SUPPORT PATHWAYS TO DAIRY NET ZERO BY:

1. Taking direct action on greenhouse gas mitigation, and/or
2. Supporting and promoting its principles

THE SIX PRINCIPLES OF PATHWAYS TO DAIRY NET ZERO ARE:

Mitigation
Continuing to improve production and process efficiency to further reduce the GHG emissions intensity of milk and dairy products.

GHG removals
Enhancing production practices that protect carbon sinks (soil, forests, grass and peatlands) and complement natural ecosystems.

Avoidance and adaptation
Improving practices such as feed, manure, fertilizer and energy management.

Insets and offsets
Identify and implement alternative, credible reduction options.

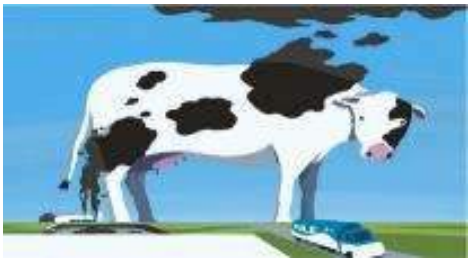
Measurement and monitoring
Measuring greenhouse gas emissions to plan mitigation and monitor progress.

Overall Support
Promoting the initiative and emphasizing the dairy sector's climate ambition.

Revealed: How Big Dairy Is Milking Net Zero

SEP 16, 2023
https://dairynews7x7.com/an-industry-led-efficiency-drive-is-about-increasing-sales-of-milk-not-cutting-pollution/

When Pathways to Dairy Net Zero (P2DNZ) made its debut ahead of the United Nations Food Systems Summit in 2021, it looked like the kind of group that could meet an important but largely neglected area of global climate response.



Armed with a seat at the highest levels of food policy, and well-connected – to dairy producers, distributors, and scientists – the initiative described itself as a "growing movement" dedicated to "reducing dairy's greenhouse gas (GHG) emissions over the next 30 years".

A month after the food summit, P2DNZ made a splash at the COP26 climate conference in Glasgow, Scotland, where Tom Vilsack, the US Secretary of Agriculture – himself the former CEO of a major dairy industry lobbying firm – expressed his department's "strong support".

Later this year, P2DNZ will also be making an appearance at COP28 in Dubai.

Dairy is a serious, but under-discussed source of planet-warming gases. Cows produce methane, a greenhouse gas that absorbs more atmospheric heat than carbon and is currently responsible for 25 percent of all global warming today. But its problems go well beyond the farm.

In 2015 the emissions generated along the entire dairy production chain – from cow to grocery store shelf – accounted for an estimated 3.4 percent of all human-induced greenhouse gas emissions. That's a larger share of global emissions than aviation.

The dairy industry's emissions are also growing fast. From 2005 to 2015, dairy's gaseous output increased by 18 percent. And while the highest levels of milk consumption per person are still concentrated in the Global North, most of the recent increase has occurred in low and middle-income countries where rising affluence has led to greater demand for dairy.

Over the past two years, P2DNZ has positioned itself as the vanguard of a global response to its sector's rising emissions at summits and high-level meetings around the world. But who is in this group and what do the various organizations backing it really want?

Getting Past The Rhetoric

The impetus for Pathways to Dairy Net Zero began with a report published in 2019 by the United Nations' Food and Agriculture (FAO) and the Global Dairy Platform (GDP), an industry group that collects and disseminates dairy-related science.

Despite a climate-centric title ("The role of the dairy sector in a low-carbon future"), the paper described global heating as just one of several problems, along with poverty and food security, where the dairy industry had an important role to play. Addressing all of them, the paper said, necessitated "win-win solutions" that could leverage the dairy industry's power without compromising it.

P2DNZ has maintained this pro-industry stance in presentations. It keeps the focus broad, promoting itself as a leader on climate change while simultaneously downplaying global warming's significance vis-a-vis other issues and espousing solutions that can serve the industry.

"It's important that we recognize dairy is not just about emissions," Donald Moore, GDP's executive director and the public face of P2DNZ, said during a presentation at the UN High-Level Political Forum on Sustainable Development last July. "When we start to tackle an issue like emissions reductions, we need to be careful that we don"t create a bigger problem in food nutrition [and] security, livelihoods, and economic growth […]"

https://youtu.be/sqEr3PuGTO4

Such rhetoric may come as little surprise considering its supporters. P2DNZ is a collaboration between GDP and five other international groups connected to the dairy industry. They include the Sustainable Agriculture Initiative (SAI) Platform (a club for food companies including Nestlé, PepsiCo and Unilever) and the International Dairy Federation (IDF, a group of dairy farmers' organisations) along with public research bodies and the FAO.

As Moore has said at various public appearances, anyone can become a P2DNZ supporter. But Global North groups dominate. Out of more than 200 groups currently listed on its website, 51 are from the United States and Canada, compared to only 11 from Africa.

P2DNZ's supporters are also overwhelmingly affiliated with industrial-scale dairy. A large majority are large, for-profit food corporations – including Starbucks and Coca Cola (which took full control of a milk brand, Fairlife, in 2020). Eight of the ten largest dairy companies in the world – along with trade groups, and

dairy farmer organisations – are also among P2DNZ's listed supporters.

These groups not only produce the most milk, they are among the largest sources of greenhouse gas emissions in the world. According to an analysis by the Institute for Agriculture and Trade Policy (IATP), in 2021, P2DNZ member and "methane giant", the Dairy Farmers of America, the largest dairy producer in the United States, emits the equivalent of the UK's entire livestock sector. Fonterra, the largest dairy co-op in New Zealand, accounts for an emissions output only slightly less than Ireland's livestock sector.

Livestock methane emissions are also rising in some of these countries. In the United States, for instance, livestock methane emissions have increased by around five percent since 2010, according to the IATP report, and by around 20 percent since 1990, even as overall methane emissions have declined.

(Following its publication, Fonterra told DairyReporter the IATP's report contained "several inaccuracies" and that it over-reported its GHG contribution. Dairy Farmers of America referred to a joint statement from IDF and GDP, which said the report had overstated dairy's overall GHG contribution.)

Any organisation can become a P2DNZ "supporter" by endorsing a five-point declaration on fighting emissions. Importantly, this does not require its highly polluting supporters to cut greenhouse gas emissions – or even to have a plan for doing so. While the declaration mentions the need to "reduce methane emissions", alongside positivist statements about the dairy industry, any reference to the need for absolute, rapid cuts in emissions – which climate scientists are urgently calling for – is noticeably absent.

The Efficiency Game

Instead, the heart of P2DNZ's emissions-reducing agenda comes down to one word: efficiency.

For the dairy industry, "Improving efficiency" – which according to point three of P2DNZ's declaration offers a way to "reduce emissions" and "improve productivity" – means using fewer resources, like feed for cows. It also means emitting less greenhouse gas per unit of milk, or reducing the greenhouse gas "intensity" of milk production.

The two kinds of efficiency are closely related, as methane, dairy's primary greenhouse gas, is a byproduct of the bovine digestive process which makes milk in the first place. In other words, more milk equals more methane. Meanwhile, the more feed a cow eats, the more milk and more emissions it tends to produce, so improving the ratio of milk to gas reduces the environmental burden of a single unit of milk.

But there"s a problem with this line of thinking. Ramping up efficiency doesn't mean less greenhouse gas in the atmosphere, only more milk per unit of gas. As the 2019 FAO and GDP report found, in the decade that dairy-related greenhouse gas emissions increased by 18 percent, dairy production had increased by 30 percent, "in response to increased consumer demand".

The dairy industry, in other words, is learning to do more with less. But instead of reducing its pollution, improving efficiency has only enabled it to produce more milk – and with it, more emissions.

"The climate does not care about efficiency – it requires absolute emissions reduction. Decreasing emissions per litre or gallon of milk while ever increasing the total amount of milk produced is not going to get us there."
– Shefali Sharma, director of the Institute for Agriculture and Trade Policy (IATP) European office

In fact, a closer look at P2DNZ shows that environmental considerations take a backseat to what appears to be the initiative's primary ambition, which is to intensify and increase dairy production. As Vilsack said at the COP26 climate summit: "to successfully feed a growing

world population… we need to scale up sustainable production".

GDP, which handles media relations for P2DNZ, did not respond to requests for comment.

Shefali Sharma, the director of the European office of IATP, says equating efficiency with climate progress is a mistake. "The climate does not care about efficiency – it requires absolute emissions reductions," she says. "Decreasing emissions per litre or gallon of milk while ever increasing the total amount of milk produced is not going to get us there. So, the dairy industry needs to dramatically rethink its model of production and growth."

Writing Efficiency Into Policy

P2DNZ might be yet one more corporate greenwashing effort had it not worked its way into some of the most influential fora of global climate policy. One of its flagship initiatives features as an "innovation sprint" – a capital-intensive project focused on a particular climate goal – which is being championed through AIM for Climate (AIM4C), the US-United Arab Emirates climate partnership that will be active at COP28. One of 51 "sprints", the project (which predates AIM4C) puts P2DNZ in a leading position to shape climate plans in middle-income "emerging dairy countries".

Nine nations (including Kenya, Colombia, and Pakistan) have already signed agreements with P2DNZ that allow the initiative and its partners to advise those countries as they write applications for support from the Green Climate Fund (GCF), a multilateral entity that helps Global South countries finance climate adaptations. As of last autumn, India was discussing representation with the initiative. These ten countries together account for about 30 percent of global dairy-related emissions.

"Frankly, this is quite concerning," Sharma told DeSmog. "These companies literally earn billions in revenue each year – they could support their suppliers in Africa and elsewhere directly, rather than depending on public funds to help them intensify livestock production in places like Kenya and elsewhere."

P2DNZ's involvement with the climate fund has already yielded results: during the COP27 meeting in Sharm-el-Sheikh, Egypt, GCF pledged millions to speed up the adoption of new climate-friendly and productivity-boosting practices and technologies by smallholder dairy producers in four countries in East Africa – all of which P2DNZ had advised.

Good Dairy, Bad Dairy

P2DNZ has broadly tailored its prescriptions to different dairy industries based on their output. "Low productivity systems" tend to be managed by pastoralists and small farmers who handle most dairy production in low and middle-income countries like Kenya, Nepal, and Mongolia. In these systems, dairy herds cover wide areas, eating as they go and leaving their waste on the ground where it fertilises the soil.

On the opposite end of the spectrum are "high productivity", or industrial systems: the high-technology, capital-intensive dairy operations in the US, Europe, and China that produce the lion's share of dairy around the world. In these systems, cows are increasingly confined in stalls – a practice which not only ensures cattle eat constantly but also that their waste sits in place, fermenting and becoming an additional source of methane along with nitrous oxide, another potent greenhouse gas.

As P2DNZ's affiliated experts freely admit, the scale of high-productivity industrial systems and the volume of their output means they produce a disproportionate amount of greenhouse gas – 37 percent of all dairy-related emissions, compared to 15 percent from low-productivity systems.

The remaining 48 percent comes from so-called "intermediate systems" – and this is where P2DNZ spies an opportunity. With high-yield systems, a larger share of emissions come from processes outside the cow's gut, like transportation, processing, or concentrated

manure, which the industry maintains makes mitigation harder to deliver. On that basis, the argument goes, reducing emissions is easier in low-productivity systems, where the cow's digestion is the almost exclusive source of warming gases, if farmers are able to adopt the feed blends and cattle health regimens that have improved efficiency for industrial dairy.

"In order to get their hands on new climate-friendly methods and technologies, farmers in the Global South will have to become ever more dependent on larger dairy processors."

A complete assessment of those "low-productivity systems" show that some actually yield some profound climate benefits, which usually go uncounted. As discussed in the Heinrich Böll Foundation's 2021 Meat Atlas, pastures grazed by roving cattle herds serve as carbon sinks. Other research proposes enhancing dairy production in ways that leave economic control in the hands of small-scale producers, such as improving land access or focusing on increasing the diversity, and quality of fodder of small herds.

But these solutions don't feature in P2DNZ's various presentations, which consistently settle on a few points: low-productivity dairy farmers need more training and more technology.

And if you're wondering who will provide those products and services, P2DNZ has an answer for that, oo.

"In the current climate, the dairy processors are in an exceptionally strong position to drive change," Richard Dewhurst, a scientist affiliated with the Global Research Alliance on Agricultural Greenhouse Gases (GRA), P2DNZ's "knowledge partner," said in one presentation. "They're really well placed to work with their farmer-producers, to advise and encourage – a carrot and stick kind of approach."

Dewhurst added that as government budgets have fallen worldwide – leaving extension services and public institutes chronically under-funded – big dairy processors who buy milk from farmers have stepped into the breach.

In order to get their hands on new climate-friendly methods and technologies, farmers in the Global South will have to become ever more dependent on larger dairy processors. And that's the kind of relationship that P2DNZ's backers have long desired.

From 'Food Safety' to Climate Change

P2DNZ's public statements on their prescriptions for Global South countries have been light on detail so far. But the track record in East Africa of one of its founding partners and other supporters gives a flavour of what's to come.

In Kenya, dairy is not only one of the biggest agricultural industries, it's one of the biggest industries, full stop. In 2010, according to one estimate, dairy provided income to 800,000 farmers – mostly small farmers – and a network of some 350,000 informal traders.

The sheer size of the Kenyan dairy industry is one of its leading attractions for both local and international investors. Since the late 1990s, when the industry was liberalised, large dairy companies, founded by some of the wealthiest families in the country, have tried to take a more dominant position, often with backing from international producers.

As far back as 2001, the US Agency for International Development (USAID) paid US dairy giant Land O'Lakes to train small farmers in Kenya to work more closely with large dairy producers.

In 2007, Nestlé collaborated with the International Livestock Research Institute (ILRI), a Kenya-based research organisation, and the Bill & Melinda Gates Foundation to launch a similar effort, but with the added objective of securing milk for their powdered milk business in the region.

At the same time, Land O'Lakes, Nestlé, and their allies launched a public safety campaign that appeared to target smaller, non industrial producers. They told Kenyans to stop buying raw milk – the informal dairy traders' standard product – because it was unsafe, and to start buying pasteurised, packaged varieties from large dairy producers instead. Simultaneously, these groups lobbied the Kenyan government to require licences for milk vendors and ban the sale of raw milk.

In response, supporters of the informal dairy traders accused the dairy companies and their allies of fomenting bogus public safety fears to capture the market for themselves. While it's true that untreated raw milk is unsafe to drink, as a 2004 Kenyan government report found, Kenyan buyers overwhelmingly knew to boil their milk first, so the risk of disease spread was very low.

Neither Land O'Lakes, Nestlé, USAID, nor ILRI responded to requests for comment. In an email, the Gates Foundation said that pasteurisation provided safety benefits distinct from boiling milk, and that Kenyan regulators have "long maintained that raw milk is unsafe".

Now that climate change is the rallying cry of the moment, P2DNZ's various industry backers are using the initiative to advance an overhaul of the Kenyan dairy sector. The Global Climate Fund's $400 million programme – of which Kenya is a beneficiary – that was announced at COP27 pledges to train smallholder dairy farmers in "productivity-enhancing" and "emission-reducing" technologies, in keeping with Land O'Lakes' and Nestlé's previous training programmes.

Not surprisingly, the same groups that were up in arms over food safety years ago are backing the new climate initiative. ILRI is one of P2DNZ's founding partners, while Nestlé, Land O'Lakes, USAID, and Kenya's Palmhouse Dairies – one of the largest dairy producers in East Africa – are all supporters.

Whether in the name of food safety or climate change, the solution these groups propose is broadly the same: to bring the local dairy industry more in line with global standards, and thus more amenable to international investment. Far from a radical step in a new direction, P2DNZ is only offering new bottles for the global dairy industry's old milk.

Introducing

SURUCHI DAIRY DASHBOARD

A periodic audit and monitoring service to enhance your dairy business competitiveness

70+
Dairy Plants & Integrated Dairy Farms.

115+
Detailed Project Reports & Market Research

2051+
Certified Dairy Entrepreneurs

Our data to solutions platform help you remove the barrier between data and action.
So you can turn real time data from all touch points from farm to table into purposeful outcome for your dairy and for yourself.

CELEBRATING 30 YEARS ANNIVERSARY

Key Deliverables

- Monthly Dashboard
- Quarterly Focus Reports
  - Quality • Costing • Productivity
  - Customer satisfaction
- Due Diligence
  - Expansion or Diversification

Suruchi Consultants

Suruchi Consultants a Friend, Philosopher and Guide to over 2000 Dairy aspirants since 1990

Contact Us :
C-49, Sector-65, Noida, Uttar Pradesh, 201307
Ph.: +91 120-4370845, 4320845
E-mail: info@suruchiconsultants.com
www.suruchiconsultants.com