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Dairy Pulse 168th Edition (16th to 31st, October 2022)



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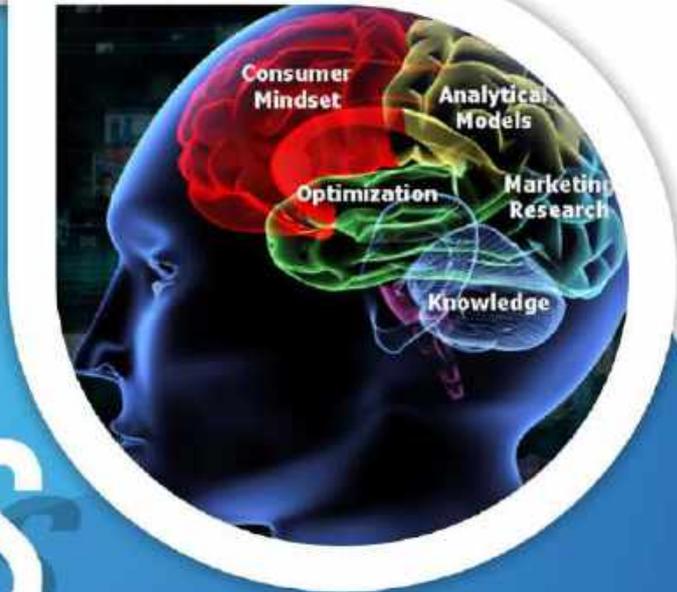
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Dairy Pulse 168th Edition (16th to 31st October, 2022)

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Indian News

Chennai: From milan? or from a milk packet?

OCT 31, 2022

<https://dairynews7x7.com/chennai-from-milan-or-from-a-milk-packet/>



As you sit down to read this article, a cup of coffee in hand, just wondering... what did you do with your milk packet? If you haven't thrown it away, how about we try something different? Like, wash it in hot, soapy water, dry it, store it, collect a few more like it and ship them all off to be recycled or upcycled. You never know, one day, you may find yourself sitting on your milk packet and enjoying that coffee. "We can upcycle 50kg of milk packets into a little stool," says Kunal Thalia of Shakti Plastic Industries (SPI), which collects milk pouches and other plastic wrappers from centres all over India, including Chennai, either directly or through tie-ups with NGOs. "Milk packets contain low-density polythene (LDPE), which can be used to make products like dustbins, stools, buckets, pens, and folders," he says. The plastic from wrappers etc is technically "down-cycled", or made into lowergrade plastics, says Kunal. "Recycled plastic is no longer food grade." SPI is just one of the avenues, says Justina Carolin of Bottles for Change, a plastic recycling initiative by Bisleri.



Hiward Datar collects 50 to 70 kgs of milk packets every month and sends them to recyclers.

"We collect more than 9,000 tonnes of plastic a month from individuals and corporates, which we send for recycling. All we need is for people to just wash, dry, and keep them ready for us to collect," she says. In Anna Nagar, Himani Datar collects milk packets from individuals, schools, gated communities, and offices, and then washes, dries, and ships them off to recyclers across the country.

"I was inspired by the Milk Bag Project in Mumbai," says Himani, now the Chennai representative of this initiative. "If people find it difficult to send me their packets, I arrange for them to be picked up. I really want these packets out of the landfill," says Himani, who collects between 50kg to 70kg a month.

Then there's 75-year-old Manglam Balasubramanian from Pammal, possibly the best-kept secret among sachet-upcycling individuals. Terrible at marketing, by her admission, customers – and that includes government officials – have been flocking to Manglam for more than 13 years now, simply by word of mouth.

"I employ local weavers and tailors, and we hand make 45 products such as bags, folders, yoga mats, and curtains from milk packets using looms and charkhas. The colours in the products are from the different types of packets — orange from the full cream milk packets and blue from the toned milk ones," says Manglam.

"There's no brand name for my products because there's no time to think of one. I devote all my time to upcycling." Renuka Devi, who held a government job earlier through which she came across Manglam's work, says her bags fashioned out of Aavin milk packets are always a conversation starter at gatherings.

"They cost about `200, but they are striking. I have converted several families into recyclers and bag buyers," says Renuka, who runs Aadhira, a skill development centre. At home, she adds, her curtains are upcycled milk pack-

ets. N Subbaiyan, MD of Aavin, says the cooperative distributes 50 lakh packets of milk a day in Tamil Nadu and 25 lakh packets a day in Chennai.

"Now, since the packets are made of food-grade plastic, recyclers pay good money for them. This helps keep them out of the landfill to a great extent. Waste collectors too send them to recyclers," he says. Aavin also has a scheme whereby milk packets can be handed over at outlets in return for around 10p a bag.

"We then send the packets for recycling," he says. "Unfortunately, only around 10% of milk packets come back to our outlets for recycling." In 2020, Consumer Action Group conducted an audit of plastics in about 200 homes and found that 40% of the plastic collected was LDPE and most of it was milk packets.

"If we recycle our milk packets, potentially 30% of the plastic waste we generate will not go to the dumpyard," says Sumana Narayanan, senior researcher at CAG. LDPE can disintegrate into microplastics, less than 5mm in size, which pollute water bodies. "There are so many ways to recycle milk packets if we just make the effort. We just need more people to stop throwing them into the bin," says Himani. Well, today seems as good a day as any to begin.

Aavin ready to face NE monsoon with sufficient stock of UHT milk

OCT 31, 2022

<https://dairynews7x7.com/aavin-ready-to-face-ne-monsoon-with-sufficient-stock-of-uht-milk-ready-in-chennai/>



Armed with over one lakh litres of Delight cow's milk packed with UHT (ultra-high temperature) technology with

a shelf life of 90 days, Aavin is gearing to face the northeast monsoon.

Sources in the Tamil Nadu Cooperatives Milk Producers Federation, which owns the Aavin brand, explained that this time it was preferring these half litre packets with 3.5% fat to skimmed milk powder since it need not be reconstituted in shelters. "It would be easier to consume and need not be refrigerated until the packet is opened," said an official.

The milk major's Sholinganallur dairy has the facility to pack upto 50,000 litres a day of UHT milk and if the need arises it can be done quickly.

"We have moved UHT milk to low-lying areas for distribution to homes along with other relief material, if required. Nodal officers have been appointed for all districts and they are in touch with the respective district collectorates and the 1.5 lakh first responders so that milk or milk-based products can be moved wherever needed," said a source.

Aavin has stocked up on butter and skimmed milk powder to reconstitute milk at its dairies. It

has taken steps to ensure uninterrupted power supply in all plants and 600 bulk milk coolers.

"Water proofing and safety measures have been taken at all our facilities."

As far as milk collection centres at societies are concerned, additional collection systems were already in place for farmers in remote areas. This is done by societies themselves. Vehicles collect milk cans, take them to the cooling centres and return the cans. Aavin has instructed farmers to ensure that cattle are kept in dry warm sheds.

Now, milk district Anand taps the Sun

OCT 31, 2022

<https://dairynews7x7.com/now-milk-district-anand-taps-the-sun/>



Five years ago, Mahesh Manibhai Patel, a farmer with 11 'vigha' land in Gujarat's Anand district, used to spend sleepless nights because his village got electricity for only eight hours, often late in the evening or at night. Now, he can draw water 12 hours a day in the daytime. He not only gets a good night's sleep, but also earns a couple of lakh rupees every year by selling surplus electricity.

The revolution in Maheshbhai's life is part of a new cooperative movement sweeping through Anand, which is home to [Amul](#) and the birthplace of India's White Revolution.

Small Beginning

In 2018, the world's first solar cooperative – Petlad Sojitra Saururja Utpadak (PSSU) Sahkari Mandali Limited – started in Anand with a seed

capital of just Rs 1,100. The idea was to replicate Amul's cooperative model in the solar energy field. Four years on, PSSU's turnover has touched Rs 12 crore. More

importantly, it has inspired seven other solar 'mandalis' (cooperatives) in a cluster of 18 villages covering 22 sq-km in Anand district. After meeting the villages' irrigation needs PSSU has enough solar power left over to supply the state grid. It has also started taking commercial contracts for installing solar panels in the region. PSSU's three agriculture feeders at Ishnav (Mahesh-bhai's village), Trambovad and Ashapuri villages generate 24,000 units daily and supply electricity to 388 farmers. In 2019, the Ishnav feeder was India's first agriculture feeder run by a solar cooperative.

"We had started with the motto to replicate the success that the Amul model has achieved in the milk business. Amul Dairy too started its journey with just 250 litres of milk," said Tejash Patel, founder and chairman of the PSSU mandali.

"We utilised the Surya Shakti Kisan (SKY)

scheme launched by the Gujarat government in June 2018. The SKY scheme enables farmers to generate electricity for their captive consumption and sell the surplus power to the grid. Under the scheme, solar panels are provided to farmers as per their load requirements,” Tejash-bhai said.

Win-Win Formula

The farmers got 30% subsidy each from the Gujarat government and the Ministry of New and Renewable Energy (MNRE). They also got 35% of the funds as a loan from Nabard. They had to pay the remaining 5% themselves, so they took a loan of Rs 3.5 crore from the Kheda District Madhya Sahkari Bank.

Tejash-bhai said they paid off the loan four months after launching the pilot project. Now the farmers will get free electricity from their solar systems for 22 years and also earn from the sale of surplus units. The cooperative’s members can expect to earn Rs 45,000-Rs 2.5 lakh per annum from electricity.

Life-Changing Power

The solar movement is changing people’s lives. “Since availability of both electricity and water to irrigate farms was an issue, I used to cultivate only wheat or millets – crops that do not require much water,” Mahesh-bhai said. “But since I have installed a 50hp solar pump, I can draw water for 12 hours during the day. I have started cultivating highyielding crops like tomato, chilli and tobacco, and earn Rs 7.5 lakh per annum, as against Rs 3 lakh from wheat and millets earlier.” That’s not counting his earnings from the sale of surplus electricity units.

The solar cooperative is also generating employment. “We have 23 employees, including engineers, who have executed many commercial projects in Gujarat. Our major clients are the dairy cooperative societies of Amul Dairy in Petlad, Sojitra, Tarapur, Khambhat, Umreth and other villages of Anand and Kheda districts, apart from Panchmahals District Agriculture Produce Market Committee and Panchmahals District Co-operative Milk Producers Union Limited,” said Tejash-bhai.

A new target found to combat AMR Salmonella affecting humans and cattle

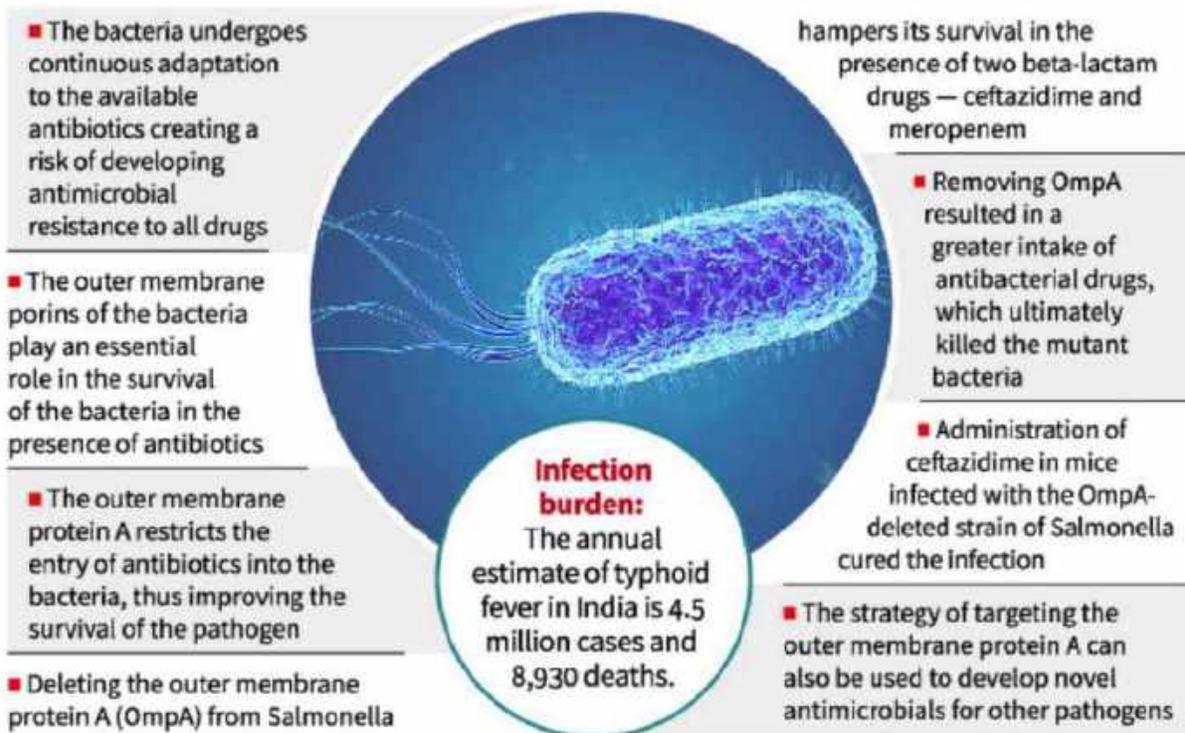
OCT 30, 2022

<https://dairynews7x7.com/a-new-target-found-to-combat-amr-salmonella-affecting-humans-and-cattle/>

Recent studies have found the emergence of multi-drug resistant *Salmonella* typhimurium DT104 that causes infections in humans and cattle.

Neutralising multi-drug resistant *Salmonella*

The bacteria causes bloodstream infection in malnourished and immunocompromised people



The rapid and unselective use of traditional antibiotics gives rise to the emergence of drug resistant phenotype in typhoidal and non-typhoidal *Salmonella* serovars, which has increased the difficulties in curing *Salmonella*-induced food-borne illnesses (majorly typhoid or paratyphoid fever, gastroenteritis, and diarrhoea) worldwide.

Salmonella typhimurium ST313, an invasive non-typhoidal *Salmonella* serovar, causes bloodstream infection in the malnourished and

immunocompromised population of sub-Saharan Africa.

Recent studies have reported the emergence of multi-drug resistant (MDR) phenotype in *Salmonella* typhimurium DT104, which causes infection in humans and cattle.

Conferring protection

The MDR phenotype in this pathogen was provided by *Salmonella* Genomic Island-1 (SGI-1), which confers protection against a wide range of antibiotics, including ampicillin (pse-1), chlo-

ramphenicol/florfenicol (floR), streptomycin/spectinomycin (aadA2), sulphonamides (sul1), and tetracycline (tetG) (ACSSuT). Further emergence of extensively drug-resistant (XDR) *S. Typhimurium* ST313 (having multi-drug resistant (MDR) and resistance against extended-spectrum beta-lactamase and azithromycin) in Africa posed a significant threat to global health.

Recent studies reported an annual incidence of as many as 360 cases of typhoid fever per 1,00,000 people, with an annual estimate of 4.5 million cases and 8,930 deaths (0.2% fatality rate) in India.

The continuous adaptation of this bacteria to the available antibiotics creates a risk of developing antimicrobial resistance in the future. This is the reason why it is essential to study the effect of new drugs and find their potential targets in *Salmonella* in detail.

A recent study carried out by our group showed that outer membrane porins of *Salmonella Typhimurium* play an essential role in the survival of the bacteria in the presence of antibiotics.

The study was published in the *Journal of Antimicrobial Chemotherapy* on September 30, 2022.

In this study, we showed that deleting outer membrane protein A (OmpA) from *Salmonella* hampered its survival in the presence of two beta-lactam drugs — ceftazidime and meropenem. OmpA is one of the most abundant barrel-shaped porin proteins localised in the outer membrane of *Salmonella*.

Absence of OmpA

The absence of OmpA in *Salmonella* hampers the stability of the bacterial outer membrane and reduces the expression of efflux pump genes.

The study further showed that the outer membrane protein A could restrict the entry of antibiotics into the bacteria, thus improving the survival of the pathogen under antibiotic treatment.

Removing OmpA resulted in a greater intake of ceftazidime and meropenem, which ultimately killed the mutant bacteria by disrupting its outer envelope.

Most importantly, this study showed that disruption of OmpA can also effectively reduce the antibiotic-resistant persister population of *Salmonella*.

Administration of ceftazidime in mice infected with the OmpA-deleted strain of *Salmonella* cured the infection and proved that OmpA plays a crucial role in antimicrobial resistance. This study is a continuation of another important research work published by our team in August 2022 (*PLoS Pathogens*), which delineated the role of *Salmonella* OmpA against the nitrosative stress of host macrophages. The loss of integrity of the bacterial outer membrane in the absence of OmpA made the bacteria highly susceptible to killing by the host's innate immune system. Other Gram-negative pathogens (*Escherichia coli*, *Acinetobacter baumannii*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, etc.) use outer membrane porins for various purposes, ranging from maintaining outer membrane stability to developing antimicrobial resistance. Reducing AMR risk

As demonstrated in our study, the strategy to target outer membrane protein A (OmpA) of *Salmonella* can also be used to develop novel antimicrobials for other pathogens that can effectively reduce the risk of antimicrobial resistance (AMR) in the future.

Curcumin compound protects cattle from diseases: study

OCT 30, 2022

<https://dairynews7x7.com/curcumin-compound-protects-cattle-from-diseases-study/>



In a major breakthrough in creating immunity in cattle against infectious diseases, including mastitis, researchers of the Transdisciplinary University of Health Sciences & Technology (TDU), Bengaluru, have successfully validated the immunomodulation ability of a natural phytochemical compound with curcumin as the active ingredient.

The study was carried out in Thrissur district in Kerala as part of academia-industry interface. At a time when economic loss due to mastitis in India exceeds ₹13,000 crore annually, there is great relevance for the findings, the researchers pointed out. They also noted that no vaccination is available against mastitis.

“Research findings revealed that the natural product offers immunity in dairy cattle against infectious diseases, including mastitis, by increasing complementary protein, interferon, immunoglobulin (IgM), lymphocytes and monocytes. Increase in calcium-phosphorus and albumin-globulin ratio and digestibility index substantiate 10% increase in milk production.

There was no incidence of mastitis during the study period,” says T.P. Sethumadhavan, principal investigator of the project at TDU, Bengaluru. Co-principal investigators of the research project include M.N. Balakrishnan Nair and C.N. Vishnuprasad. Molecular laboratory investigations were done at the TDU’s laboratory and the Kerala Veterinary and Animal Sciences University’s laboratory at Kokkalai Veterinary Hospital, Thrissur.

“Antibiotics have been used to manage various infections in cattle. However, it has been noticed that the uncontrolled use of antibiotics results in increased antibiotic resistance. The use of antibiotics for treating mastitis results in inter-species and inter-genus transfer of antibiotic resistance and creation of various multi-drug resistant microorganisms in the environment, which affects immunity of livestock and human health,” says M.N. Balakrishnan Nair, Professor & Head, Ethno Veterinary studies at TDU.

“The compound with curcumin can be used to control mastitis as a prophylactic measure during pre-partum and post-partum stage along with cattle feed under scientific management practices,” according to researchers.

For States like Kerala where more than 96% cattle are crossbreeds, control of mastitis assumes more significance, they add.

Farmers demand hike in milk price from Collector in Tamil Nadu

OCT 29, 2022

<https://dairynews7x7.com/farmers-demand-hike-in-milk-procurement-price-from-collector-in-tamil-nadu/>



Dairy farmers demanded hike in procurement prices of cow and buffalo milk during the monthly farmers' grievances redressal meet chaired by Collector S. Visakan in Dindigul on Friday.

Stating that the last time the procurement prices were increased was in 2019, N. Perumal, district president, All India Kisan Sabha charged that in the current economy, "milk farmers are forced to bear a loss of ₹6 per litre because of a 40% hike in raw materials such as hay."

He petitioned the Collector to increase the procurement price of cow milk per litre to ₹41 against the present price of ₹31, while he sought a ₹10 hike per litre for buffalo milk from ₹42. Among his other demands was for the State to procure paddy with a moisture content of up to 22% against the current 18%.

Further, Mr Perumal also wanted to include farmers cultivating onion, banana, pepper, lady's finger and brinjal from Sanarpatti, Natham, Batlagundu, Dindigul and Kodaikanal blocks to benefit under the Prime Minister's Crop Insurance Scheme (Pradhan Mantri Fasal Bima Yojana-PMFBY).

S. Fathima Rajarathinam of Panjampatti in Athoor Taluk submitted a petition to the district administration to provide pesticides to tackle the invasive insects ravaging coconut plantations in the district. "Subsidies given per hectare for farmers who grow onion, tomatoes and potatoes were stopped after 2019, which must be revived for the benefit of farmers," he added. Member of Bharatiya Kisan Sangam, C. Chelathurai of Nochiodaipatti in Sanarpatti block along with five farmers petitioned the Collector to remove encroachments on a water channel in Kanavaipatti Panchayat. C. Vellasamy, one of the affected farmers, said that the encroachment of about 500 metre has been affecting over 20 farmers for the past four months. "The encroachment blocks the entry of water into a tank belonging to the Panchayat which facilitates the irrigation to over 30 acres of land where paddy and coconut are grown. We have petitioned the Block Development Officer and the Panchayat President, but no action has been taken," he said and added that the Collector has assured to look into the issue.

According to a press release, the Collector directed the Joint Director of Agriculture to examine the petitions submitted by the farmers and to take action within 15 days.

Additional Collector C. Dinesh Kumar, District Revenue Officer V. Latha and others were present.

Haryana dairy cooperative Vita sees all-time high profit

OCT 29, 2022

<https://dairynews7x7.com/haryana-dairy-cooperative-sees-all-time-high-profit/>



Haryana Dairy Development Cooperative Federation Ltd Chairman Randhir Singh Golan on Friday said the federation has earned a profit of Rs 49.57 crore in the last two and a half years owing to improving the quality of products.

The total combined turnover of the federation rose from Rs 1,159 crore in 2019-20 to Rs 1,505

crore tentatively in 2021-22. Accordingly, the total combined profit witnessed a steep growth of three times from Rs 11.50 crore in 2019-20 to Rs 49.57 crore in 2021-22, which is an all-time high.

Golan said the sale of milk has witnessed a seven per cent increase during April-June 2022 quarter as compared to the same period last year. The sale of ghee during this period has witnessed an increase of 29.95 per cent, curd 54.5 per cent and 'lassi' 48.70 per cent.

Milk union increases procurement price

OCT 28, 2022

<https://dairynews7x7.com/milk-union-increases-procurement-price/>



Shivamogga, Davangere and Chitradurga Districts' Cooperative Milk Producers' Societies Union has increased the milk procurement price with effect from November 1. The union has increased the price by ₹2 per kg as a gift on the occasion of Kannada Rajyotsava. This decision was taken at the executive council meeting held on October 25. This helps the milk producers in three districts – Shivamogga, Davangere and Chitradurga.

At present, the union is offering ₹30.06 per kilo of milk with 4% of fat and 8.5 % of SNF to the milk producers' societies. This has been increased to ₹32.06. The milk producers' societies will be offering ₹30.20 per kg of milk, against the present price of ₹28.20 per kg.

Sripada Rao, president of the union, in a press conference in Shivamogga on Thursday, said the union was in a loss earlier this year, but it had been making profit after he took over. The union was strong enough to bear the revised procurement price.

Further, he said the milk unions had sought an increase in milk selling prices. However, the KMF had not given consent. "The neighbouring States have been selling milk at ₹63 to ₹ 73 per litre", he said.

Amul Congratulates UK PM Rishi Sunak In A Creative Way

OCT 28, 2022

<https://dairynews7x7.com/amul-congratulates-uk-pm-rishi-sunak-in-a-creative-way/>



A [mul](#)'s doodle instantly grabbed attention on the internet with people applauding the creativity.

Rishi Sunak became Britain's third Prime Minister this year and scripted history by becoming the first Indian-origin person to hold the top job. Wishes for Mr Sunak have been pouring in from all around the world. In one such congratulatory message, dairy brand Amul came up with an interesting creative to wish luck to the UK's new Prime Minister.

Amul took to Instagram to share the image. The company's mascot can be seen with Mr Sunak in London. The text in the image reads, "Rishi Sunuk. Prime Makhan," in blue colour where some letters have been highlighted in red to make it appear as "UK PM."

The post has been captioned, "#Amul Topical: Welcoming Britain's first Indian origin PM!" Even though the post was shared five hours

ago, it has managed to amass over 5,000 likes on Instagram.

Many users were left impressed with the creative messaging. One user wrote, "Wonderful! Amul ka jawab nahin! (No words for Amul). Another one commented, "Amazing!" There were others who left laughing emojis and clap emojis on the post.

Mr Sunak has been receiving a flurry of welcome messages from around the world. Prime Minister Narendra Modi took to Twitter yesterday and wrote, "As you become UK PM, I look forward to working closely together on global issues. Special Diwali wishes to the 'living bridge' of UK Indians, as we transform our historic ties into a modern partnership."

US President Joe Biden said it was "groundbreaking" that Britain would be led by a person with Indian heritage. "It's pretty astounding, a groundbreaking milestone and it matters," Mr Biden said at a White House celebration of the Indian Diwali festival celebrated on Monday. "I look forward to our further cooperation and partnership in NATO and (the) G7 as close friends," German Chancellor Olaf Scholz tweeted.

India GST: The 'cheesy' row over pizza toppings tax in India

OCT 27, 2022

<https://dairynews7x7.com/india-gst-the-cheesy-row-over-pizza-toppings-tax-in-india/>



It can be a challenge to get the right mix of toppings that makes a pizza delicious. An overload of toppings could make the dough soggy and a wrong mix can affect the flavour. But in August, an Indian firm making pizza toppings mounted a different challenge in a court. It was not about the taste of the toppings. It was a dispute over the rate of Goods and Services Tax (GST) that they attracted.

Since it was introduced five years ago, the nationwide uniform levy has helped boost India's taxes: the GST is now generating more than \$17bn (£15bn) a month for the [world's fifth largest economy](#).

In court, the Khera Trading Company argued that their mozzarella topping should be classified as cheese, which attracts a lower GST of 12%. After all, cheese and milk solids made up more than a third of the toppings, it said. But a court in Haryana state disagreed. It said the cheese in the topping could not be truly classified as cheese alone.

The toppings, it said, contained vegetable oil – 22% of the ingredients, to be precise. The firm said the oil helped with the texture, added flavour to the pizza and was cheap as well.

The court said vegetable fat was not an ingredient of cheese. That would disqualify the toppings to be counted as cheese – instead, it would be called an “edible preparation” and taxed at a higher 18%. The firm lost its case.

Such courtroom battles lead tax experts to believe that India's ground-breaking GST – which replaced a thicket of local taxes across 29 states – is too convoluted. With five different rates – 5%, 12%, 18% and 28% and zero for unpacked

food – the tax on nearly 2,000 goods and services has become too cumbersome, they say. (Petrol, diesel, electricity and real estate are exempt from GST).

“This has led to confusion on the categorisation of a product or service based upon specified codes along with their rates. There has been a plethora of [court] rulings since the inception of GST,” says Anita Rastogi, partner, GST and indirect taxes, at PricewaterhouseCoopers, a consulting firm.

The tax especially seems to have tied itself in knots when it comes to India's food industry. In September, a court ruled on a 20-month-long case over the paratha, a crisp, flaky pan-fried flatbread which attracts a GST of 18% as opposed to roti, a basic round flatbread which is taxed at 5%.

A Gujarat-based firm, Vadilal Industries, went to the court in June last year questioning why their packed frozen parathas – it made eight different types, some stuffed with cooked vegetables – should be taxed differently from rotis, a sub-continental staple. After all, the key ingredient in both was wheat flour.



Image caption,The humble roti attracts a 5% GST...



Image caption,...while the paratha is dearer at 18% tax

The court said no. The judge agreed that packed parathas mainly contained wheat flour but – here comes the catch – also had “other ingredients” such as water, vegetable oil, salt, vegetables and radish. Rejecting the plea the court said: “The parathas supplied by the appellant are different from roti.”

There are more of such head-scratching verdicts, as many term them. A court decided that ice creams sold by parlours would attract a higher (18%) tax than ice cream sold in restaurants since they sell “already manufactured ice cream and do not cook/prepare ice cream for consumption like a restaurant”. The parlours sell ice cream as a “good and not as a service, even if the supply has certain ingredients of a service”.

Then there was a case in Gujarat involving a maker of ‘fryums’ – an Indian snack food made of potato starch and sago – who wanted his product to be exempt from GST like papadams, thin, round pancake snacks. But the court noted that fryums were ready-to-eat when sold, while papadams had to be cooked. “Both the products are different and have their individual identity,” the judge said. The ‘fryums’ continue to attract a 18% tax.

A flavoured milk maker went to court challenging the 12% tax on his drink when ordinary milk enjoyed a tax exemption. The firm said its product comprised “92% milk, and only 8% sugar”. But the court said flavoured milk was not covered under the “definition of milk” in the laws

and therefore was not exempt from the tax. And then there was a dispute over whether ready-to-cook [dosa](#) (a popular breakfast food) and [idli](#) (a steamed rice cake) should attract a higher tax than the [batter](#) used to make them.



Image caption,Papadams, a popular snack, are exempt from GST

Tax experts believe one way to get around this would be to simplify and collapse the different rates into one reduced rate. (80% of the countries which introduced the GST after 1995 have opted for a single rate.)

Economists Vijay Kelkar and Ajay Shah say that “various pressure groups [in India] lobby for higher or lower taxes on one industry or another, and this distorts the resource allocation of the economy”. With the government being a major buyer of goods and services, a low single-rate GST would “yield cost savings for all levels of government”, they believe.

A low single rate is likely to eliminate classification disputes, reduce incentives for evasion and bring down compliance costs .

“The moment you conflate or reduce the rates, classification disputes will reduce. But in a country like India with high income disparities, a single or even a dual rate structure risks imposing a larger tax burden on the poor,” says Uday Pimprikar, partner, indirect tax services, India, at global accounting and consultancy firm EY. Prime Minister Narendra Modi had once described the GST as a “good and simple tax”. Clearly, it hasn’t entirely turned out that way.

Amul's digital platform opens a window to cattle trade

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<https://dairynews7x7.com/amuls-digital-platform-opens-a-window-to-cattle-trade/>



Move over cattle fairs. Dairy farmers are taking to online marketplaces to buy and sell bovines.

Take Ghomtiben Patel, a dairy farmer in Gujarat's Kheda district, who has put her 4-year-old buffalo on sale for ₹1.10 lakh on Pashudhan, an eBay like marketplace for cattle introduced by [Amul](#) recently.

All Ghomtiben had to do was upload three photographs of the animal on the Android mobile app along with details such as its breed, location, and a day's milk yield (14 litres). Over 160 farmers saw the post, with four showing interest in buying it.

Pashudhan is part of the Amul Milk Producers' App — a free app for the 36 lakh dairy producers who are part of the co-operative giant. Launched two months ago, the app is fast gaining traction with over 900 posts with a transaction value of ₹5 crore placed on it. On sale are 256 female buffaloes of Banni, Jaffrabadi, Mehsana, Murrah, Surti and other breeds.

About 330 cow breeds such as Holstein Friesians, Gir, Sahiwal, Kankrej and Dangi are up for sale too.

There are also two dozen bulls and male buffaloes on sale. The price sought for the cattle ranges from ₹32,000 to as high as ₹2 lakh per animal.

"It is a wonderful tool for transparent cattle trade, which was earlier completely dependent on references and commission agents.

"This directly connects the buyer and the seller, thereby providing transparency and savings on commission," said Shamalbhai Patel, Chairman of Gujarat Cooperative Milk Marketing Federation (GCMMF), which owns the Amul brand.

24X7 marketplace

According to Jayen Mehta, Chief Operating Officer, Amul, "this has become a 24x7 marketplace for cattle. Farmers can negotiate for price and filter the search criteria based on their preferred distance, breed, type of cattle, productivity, price range, location, etc."

For the dairy major, the app provides massive real-time data on cattle, enabling it to do trend analysis and keep an eye on the developments on the ground.

As per the Amul database, the 36 lakh producers registered with milk cooperative societies in Gujarat between them own 25 lakh indigenous cows, over 35 lakh hybrid cows and more than 70 lakh buffaloes.

Akshayakalpa Organic to add 1,800 farms in 2022-23 fiscal

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<https://dairynews7x7.com/akshayakalpa-organic-to-add-1800-farms-in-2022-23-fiscal/>



Akshayakalpa Organic, a Bengaluru-based organic dairy products manufacturer, will add 1,800 new farms to its production cluster in order to strengthen its position in the existing markets, says Shashi Kumar, co-founder and CEO of Akshayakalpa Organic. Cluster farms are basically made up of several individual farms that are close to one another, and currently, the company runs 780 such farms to supply products to three cities. “By July 2023, we will add 1,500 more farms to the Tiptur cluster and 300 farms to the Chennai cluster, of which 100 will go live by January 2023. However, due to the prerequisites for organic certification, going live in the Hyderabad cluster will require two more years,” said the CEO.

The company supplies its products to a total 60,000 households in three cities — Bengaluru,

Chennai, and Hyderabad — and has a daily milk production capacity of about 70,000 litres. According to the company, while its primary focus is to expand its business in the existing cities, it also intends to enter newer markets such as Mumbai, Pune, and Kochi. In FY22, Akshayakalpa generated revenues of ₹117 crore. Kumar explained, “In the last five years, we have grown at a compound annual growth rate (CAGR) of 60 per cent year on year and expect to generate ₹200 crore this financial year.”

Farm visit

The company runs two farms in Bengaluru and Chennai.

According to the CEO, farm visit programmes have paid well in terms of marketing organic foods, “It is working well and is one of the deep marketing strategies of ours. Rather than deploying funds to acquire customers, the education of the customer has helped our business grow,” he added. The company started the programme around two years ago and currently has a footfall of 100 people every weekend, said Kumar.

Udupi Dairy farmers to launch postcard campaign seeking hike in milk price

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<https://dairynews7x7.com/udupi-dairy-farmers-to-launch-postcard-campaign-seeking-hike-in-milk-price/>



Dairy farmers attached to Sahakara Bharathi, a NGO of cooperatives, will launch a postcard campaign by holding a convention of farmers in Udupi on October 27 to urge the State government to hike the milk procurement price by ₹5 a litre.

According to the convener (dairy farmers' cell) of Sahakara Bharathi Sanoor Narasimha Kamath, the convention will be held at the Rajangana of Sri Krishna Mutt.

He said the cost of milk production has increased manifold due to a hike in the price of cattle feed.

Though the dairy farmers have been urging the government to increase the milk procurement price, the government has not responded positively.

Mr. Kamath said that dairy farmers in Udupi and Dakshina Kannada districts who supply milk to the Dakshina Kannada Cooperative Milk Union Ltd. through 734 milk producers' cooperative societies on a daily basis are now being paid ₹35 per litre. "The farmers should get ₹40 a litre to overcome the production cost," he said.

Initially, 1,000 dairy farmers of Udupi district will write their demand in postcards and seek the intervention of Chief Minister Basavaraj Bommai. The campaign will be extended to other parts of the State later. The Sahakara Bharathi members in their respective districts will submit memoranda in this regard to the Deputy Commissioners and the district in-charge Ministers, he said.

Later, 5,000 dairy farmers from each district will participate in the campaign by posting postcards to press for the demand, he said.

Supreme Court quashes conviction for excess moisture in paneer

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<https://dairynews7x7.com/supreme-court-quashes-conviction-for-excess-moisture-in-paneer/>



The conviction a person for food adulteration on the ground that moisture content in the paneer sold by him exceeded the prescribed limit of 70 percent, was quashed by the Supreme Court last week [Bhattacharjee Mahasya and anr vs State of West Bengal and anr].

A bench of Justices S Abdul Nazeer and V Ramasubramanian said that the expert evidence did not take into consideration the proviso to Section 2(i)(m) of the Prevention of Food Adulteration Act which exempts adulteration due to natural causes beyond human control.

"There was no whisper in the complaint or in the evidence as to whether the case would fall

under the proviso. For instance, the report of the public analyst says that the moisture content was 77.6% and that as per the prescribed standard, it shall not contain more than 70%. But there is no indication as to whether the moisture content was more due to natural causes. Even, the milk fat content of the dry matter may depend upon the quality of the milk and this question was also not gone into," the apex court said.

The appellant Bhattacharjee Mahasya moved the Supreme Court after a Magistrate had convicted and sentenced them to two years in prison, which was upheld by the Sessions Court and later partially modified by the Calcutta High Court, which reduced the punishment to three months.

A complaint had been filed against the appellant stating that paneer stored in his shop for sale was found adulterated.

In order to ascertain the same, the food inspector purchased 750 grams of paneer from the shop and sent it for examination by the public analyst in the office of the Local Health Authority.

The public analyst submitted the following report:

6. Interestingly, the opinion of the Public Analyst, which formed the foundation for the prosecution, reads as follows:

"Opinion:- The sample of Paneer does not conform to the prescribed standard in respect of moisture & Milk Fat content of the dry matter. Hence, it is highly adulterated."

Judgement part

"The sample of paneer does not conform to the prescribed standard in respect of moisture and milk fat content of the dry matter. Hence, it is highly adulterate."

On the basis of the opinion of the analyst that deemed the moisture content of the paneer at 77% which was above the prescribed limit of 70 percent, and prosecution was launched.

This led to the conviction of the appellant.

The Court, however, said that the whole case was 'much ado about nothing' since the courts below failed to consider the exemption provided by the proviso to Section 2(ia)(m) which

protects deterioration of food articles due to natural causes.

9. There was no whisper in the complaint or in the evidence as to whether the case would fall under the proviso. For instance, the report of the Public Analyst says that the moisture content was 77.6% and that as per the prescribed standard, it shall not contain more than 70%. But there is no indication as to whether the moisture content was more due to natural causes. Even, the milk fat content of the dry matter may depend upon the quality of the milk and this question was also not gone into.

Judgement part

"Therefore, we are of the view that a petty shop owner has been prosecuted by making much ado about nothing. Hence, the appeal is allowed and the impugned order of the High Court confirming the order of the Sessions Court and the order of the Magistrate are set aside," the Court ordered.

Advocates Soumya Dutta, Rohit Bansal, and Harsh Bansal appeared for the petitioners. Advocates Kunal Chatterji, Maitrayee Banerjee and Astha Sharma represented the respondents.

Lumpy skin disease spreads in AP, cattle population at risk

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<https://dairynews7x7.com/lumpy-skin-disease-spreads-in-ap-cattle-population-at-risk/>



The lumpy skin disease (LSD), an infectious viral ailment among the cattle, is spreading in Andhra Pradesh, especially in the north coastal region, triggering concern among the dairy farmers and cattle breeders.

Viral disease experts say LSD is a contagious viral disease and causes fever. It spreads among the cattle through mosquitoes, flies, lice and wasps by direct contact, as also through contaminated food and water. Accompanied by severe debilitating symptoms, the infection is transmitted from infected cattle to other cattle. "LSD is caused by goat pox virus, likely spreading through blood feeding insects. Originated from Africa, LSD is declared as endemic in most African and Middle Eastern countries as also In-

dia. It has spread to cows in AP two years Odisha reported the first case,” a senior official from the animal husbandry department said. With stray cases of LSD reported from Srikakulam, Vizianagaram, Kakinada and other districts close to neighbouring Odisha, Tamil Nadu and Karnataka, the AP animal husbandry department took up massive efforts to vaccinate cattle in all districts. Mass inoculation is being done free of charge by the department.

In Chittoor, district animal husbandry officer (DAHO) Venkat Rao said around 1.50 lakh cows have been vaccinated, while another 2.86 lakh are being enlisted for this. The department has procured 4.60 lakh doses of pox vaccine. So far, no case of LSD was reported in the district, but cows are still vaccinated as a precautionary step.

Rao said the field staff are on the job to educate dairy farmers. Mosquitoes play vectors for the disease. To prevent its spread, cattle sheds should be protected from mosquitoes. “We are

conducting awareness camps. The transportation of cattle and cattle fairs have been banned in the district up to October 31,” he said.

Allaying the fear that the disease might spread to humans, the DAHO said no scientific evidence supported such fears.

“There is evidence of animal-to-animal transmissions, but not of animal-to-human transmission. It is not a zoonotic disease. Only buffaloes, cows, goats and sheep are affected. No such case of transmission from animals to humans has been reported so far and cow milk can be consumed after boiling properly”, he said.

According to Tirupati DAHO Dr Venkateswarlu, the district has not seen any LSD case but the preventive vaccination drive against the disease is under way. The district has a cattle population of 2.59 lakh cows and 2.79 lakh buffaloes. The district has so far received 70,000 doses, of which 50,000 doses have been administered to the cattle, and the process was ongoing.

Dodla Dairy Sep22 Net Sales at Rs 695.32 crore, up 22.77% Y-o-Y

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<https://dairynews7x7.com/dodla-dairy-consolidated-september-2022-net-sales-at-rs-695-32-crore-up-22-77-y-o-y/>



Reported Consolidated quarterly numbers for Dodla Dairy are:
Net Sales at Rs 695.32 crore in September 2022 up 22.77% from Rs. 566.37 crore in September 2021.
Quarterly Net Profit at Rs. 39.45 crore in September 2022 up 34.2% from Rs. 29.40 crore in September 2021.

EBITDA stands at Rs. 64.62 crore in September 2022 down 0.57% from Rs. 64.99 crore in September 2021.

Dodla Dairy EPS has increased to Rs. 6.63 in September 2022 from Rs. 4.94 in September 2021.

Dodla Dairy shares closed at 512.45 on October 24, 2022 (NSE) and has given 3.83% returns over the last 6 months and -16.15% over the last 12 months.

Dodla Dairy[Previous Years »](#)**Standalone Quarterly Results**

----- in Rs. Cr. -----

	Sep '22	Jun '22	Mar '22	Dec '21	Sep '21
Net Sales/Income from operations	643.40	656.99	540.39	532.18	535.79
Other Operating Income	--	--	--	--	--
Total Income From Operations	643.40	656.99	540.39	532.18	535.79
EXPENDITURE					
Consumption of Raw Materials	473.70	513.24	395.20	372.43	386.63
Purchase of Traded Goods	--	--	--	--	--
Increase/Decrease in Stocks	9.51	0.27	12.10	20.87	-5.50
Power & Fuel	--	--	--	--	--
Employees Cost	26.83	25.89	23.84	23.22	23.15
Depreciation	14.70	14.16	12.34	12.31	12.23
Excise Duty	--	--	--	--	--
Admin. And Selling Expenses	--	--	--	--	--
R & D Expenses	--	--	--	--	--
Provisions And Contingencies	--	--	--	--	--
Exp. Capitalised	--	--	--	--	--
Other Expenses	82.33	84.85	70.28	71.75	73.81
P/L Before Other Inc. , Int., Excpt. Items & Tax	36.34	18.58	26.64	31.60	45.47
Other Income	5.59	4.55	21.62	4.34	3.63
P/L Before Int., Excpt. Items & Tax	41.93	23.13	48.25	35.94	49.10
Interest	0.30	0.28	0.29	0.29	3.69
P/L Before Exceptional Items & Tax	41.64	22.86	47.97	35.65	45.41
Exceptional Items	--	--	--	--	--
P/L Before Tax	41.64	22.86	47.97	35.65	45.41
Tax	7.44	5.95	-8.07	10.70	13.53
P/L After Tax from Ordinary Activities	34.19	16.91	56.03	24.95	31.88
Prior Year Adjustments	--	--	--	--	--
Extra Ordinary Items	--	--	--	--	--
Net Profit/(Loss) For the Period	34.19	16.91	56.03	24.95	31.88
Equity Share Capital	59.49	59.49	59.49	59.49	59.49
Reserves Excluding Revaluation Reserves	--	--	--	--	--
Equity Dividend Rate (%)	--	--	--	--	--
EPS Before Extra Ordinary					
Basic EPS	5.75	2.84	9.42	4.19	5.36
Diluted EPS	5.70	2.82	9.34	4.16	5.31
EPS After Extra Ordinary					
Basic EPS	5.75	2.84	9.42	4.19	5.36
Diluted EPS	5.70	2.82	9.34	4.16	5.31
Public Share Holding					

Application of ICT for transfer of technology in Dairying

OCT 25, 2022

<https://dairynews7x7.com/application-of-ict-for-transfer-of-technology-in-dairying/>



The National Bureau of Animal Genetic Resources (NBAGR), Karnal has developed a software package entitled, 'Information System on Animal Genetic Resources of India' (AGRIS-IS). It is a database system that can store information on different breeds of domesticated animal and poultry, list of livestock farm, semen banks, breeding tracts and related literature.

The Veterinary Parasitology division of ICAR Research Complex for North Eastern Hill Region, Meghalaya has developed a computer software package to facilitate the diagnosis of oocyst, eggs, larvae of different parasites of livestock and human beings, so that a definite conclusion can be made in the diagnosis of parasitic diseases.

National Centre for Integrated Pest Management (NCIPM) has developed Nematode Management Information System (NMIS) software for identification and management of different types of nematodes. This is user-friendly software which includes the information about identification, symptoms with pictures, and management of each nematode.

Role of ICT in Dairy Sector

ICSs are more applicable and beneficial in dairy processing plants, feed mixing units, meat processing units. Computer-based information systems are being used to assist the management in speeding up data processing activities and maintaining quality control of milk products. Important applications of ICTs are presented below:

ICT tools are efficiently used in on-line weighing

and quality testing of milk. Computer-based systems enable prompt, accurate and immediate payment to the milk producers and minimize the malpractices and underpayment.

Widespread use of sensor network can improve the monitoring of dairy plant and generate valuable inputs for crisis management. For example, environmental sensors to monitor temperature, video cameras/image sensor for security, plant operations and observing behaviour of staff, visitors, etc.

GPS is useful to trace vehicles during milk transportation, from collection centres to central dairy dockyard and marketing of dairy products to minimize malpractices on route. Artificial Neural Network (ANN) tools also have been used by researchers to solve problems related to dairy and food processing.

E-nose has many applications in sensory evaluation of quality of foods, detection of environmental toxins, carcinogens and pollutant, air quality as well as in medicine. It is useful in identifying adulterants, toxins, contaminants and aroma differences in food products. It also helps in assessing the quality acceptance and ageing process of stored food products.

E-tongue helps in continuous control on product quality in food industry. It is also used widely in quantitative analysis and recognition (identification, classification) of a very wide range of liquids, quality control and identification of the conformity to standards for different food stuffs-juices, coffee, beer, wine, spirit, etc. It also helps in continuous monitoring of test quality of food from raw material stage to final product.

Rotos are being used in many food processing activities because of their versatile features. They are used in high speed repetitive opera-

tions in modern day food processing and packaging where human operators begin to show onset of fatigue thereby increasing risk of metal errors causing quality or hygiene problem. They are also being used in precision curd slicing and ultrasonic cheese slicing, food packaging and stacking operations.

Simulation is a mathematical model used as a powerful tool in food processing applications for understanding the behaviour of complex interactive systems, predicting operation results, developing process control system or optimizing the performance of a system.

The functions of many automatic milk and food processing equipment are based on ICT enabled technologies such as determination of solid-not-fat (SNF) in milk. Application of ICTs in processing of food products reduces the manpower handling which helps to meet international hygienic and safety standards of the products.

Information Kiosks

A kiosk is a small shop, open at the front, where newspapers, sandwiches, soft drinks, etc. are sold. It is also synonymous to a public telephone box or booth. An information kiosk (or information booth) dispenses free information in the form of maps, pamphlets, and other literature, and/or advice offered by an attendant. Generally, information kiosk means booth with telecommunication and ICT facility. Information kiosk may store data locally, or retrieve it from a computer network. Information shops (Kiosks) are the places where computer-based information relating to better cultivation practices, value added information on market price, weather forecast, bus and railway time table are available.

Each kiosk is provided with a computer and modem with telephone dial-up to connect the data bases/agricultural portals. The farmer can take the assistance of the operator of the kiosk for nominal charges.

The concept of information kiosks is being discussed, debated and experimented in India at various places, Example:

Info village of the M.S. Swaminathan Research Foundation (MSSRF), e-choupals of Indian Tobacco Corporation (ICT), touch screen information kiosk of the Rajiv Gandhi College of Veterinary and Animal Sciences.

Social Media

Social media are the means of electronic communication over the Internet. They use special application software for interpersonal communication. Communication through social media can be done using computer or mobile phone. Greatest advantage is person to person communication with mass participation. Other advantages include cost effectiveness, location specific, problem oriented, user generated content, democratic, etc.

Social media has shaped the way people consume information, from only consumers of information to users who express opinions, share feedback and even create content. By 2021, the Internet users in India are set to double.

With over 420 million mobile Internet users in the country, it has brought power to people's hands. The proliferation of smart phones has contributed to the rise of the phenomenon where users through devices can now participate from anywhere.

For example, Face book can be done through the mobile and computer, WhatsApp can be used only through mobile phone. The easy accessibility of social media through smart phone has made this new media useful for extension. Many institutions and organisations have social media as their links such as Facebook, Twitter, YouTube, etc. Nowadays, WhatsApp has become an important social medium to communicate with peers and clients. But the communication being personal and within group not much communication is possible within cross groups.

Drive against food adulteration: Food Safety Officers collect 133 samples in past 10 days

October 22, 2022, 10:20 PM IST

<https://www.freepressjournal.in/indore/drive-against-food-adulteration-food-safety-officers-collect-133-samples-in-past-10-days>

Indore(Madhya Pradesh): Continuing the drive against sub-standard and adulterated food products, a Food and Drug Administration (FDA) department team raided three different places in the city on Saturday and collected 10 samples of mawa, sweets, paneer and ghee. In view of the Diwali festivities, the officials continued to put a check on the sale of adulterated food, especially milk, milk products and mawa sweets, as their consumption increases during the festivities.

The food safety officials said they had collected more than 133 samples in the past 10 days and the drive would continue even after Diwali.

“We’re checking sweet shops across the city to check the milk and milk products. We’re taking

action against milk parlours and seizing samples of milk and milk products, besides warning them to maintain cleanliness and hygiene,” food safety officer Dharmendra Soni said. He added that the samples collected on Saturday included six samples of mawa, two samples of sweets and one sample of paneer and ghee each. “We’re also cracking down on shops selling mawa sweets, namkeens (salted snacks) and beverages,” he said.

More samples of sweets & namkeen

According to officials, in the past 10 days, 34 samples of namkeen, 17 samples of mawa, 3 samples of milk, 48 samples of sweets, 17 samples of milk products and 15 samples of other food products have been taken.

Mother Dairy reported a 46% decline in fiscal 2022 net profit

OCT 22, 2022

<https://dairynews7x7.com/mother-dairy-reported-a-46-decline-in-fiscal-2022-net-profit/>



Mother Dairy Fruit And Vegetable Private Limited which manufactures dairy products and edible oils reported a 46% decline in fiscal 2022 net profit to ₹100 crore, according to financial data accessed by business intelligence platform, Tofler. The company had reported a profit of ₹185 crore in the previous fiscal.

Meanwhile, for the financial year ended 31 March 2022, the company reported a 20% jump in revenues to ₹12,583 crore; it had reported

revenues of ₹10,452 crore in the year-ago period.

The company’s total expenses for the fiscal stood at ₹12,418 crore up 21% from the year-ago period.

To be sure, Mother Dairy manufactures, markets and sells milk and milk products including cultured products, ice creams, paneer and ghee under the ‘Mother Dairy’ brand.

The company also has a diversified portfolio with products in edible oils under the ‘Dhara’ brand and fresh fruits and vegetables, frozen vegetables and snacks, unpolished pulses, pulps and concentrates, etc. under the ‘Safal’ brand. Mother Dairy was commissioned in 1974. It is a wholly-owned subsidiary of the National Dairy Development Board (NDDB). It was established under the initiative of ‘Operation Flood’, the

world's biggest dairy development program launched to make India a milk-sufficient nation.

Mother Dairy through its brands has a national footprint across all major cities in India.

BJP's Vote Politics Is Evident :Amul Not raising milk price in Gujarat

OCT 22, 2022

<https://dairynews7x7.com/bjps-vote-bank-politics-is-evident-putting-on-hold-milk-price-of-a-brand-in-gujarat/>



Accusing BJP of doing vote bank politics, Chief Minister Mamata Banerjee Thursday said it is evident from the way it put on hold the hike in milk prices of a nationally known milk brand in poll-bound Gujarat. Banerjee, who was inaugurating a community Kali Puja at Janbazar in the city, said the saffron party is “jealous” of her government and ignores the good work done by it in the past 11 years as it is only interested in showing her government in poor light for narrow political gains. She claimed that in the 11 years of Trinamool Congress’ rule in Bengal employment has risen by 40 percent while there has been a decline in the employment figure in the rest of the country.

On the issue of the rise in milk prices by a nationally known state cooperative, Banerjee said, “Have you ever heard that the milk price of the same brand has not increased in Gujarat whereas it has been hiked in Bengal and some other states?

“Is this because of impending elections in Gujarat? Will you (BJP regime) always treat states like Bengal in such a differential manner,” the strident critic of the saffron party said.

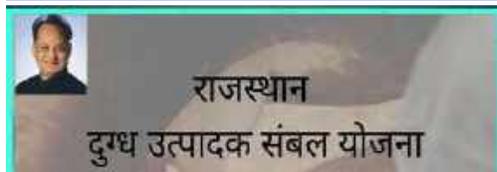
Dates for the Assembly poll in Gujarat are likely to be announced post-Diwali.

Speaking about development projects in Bengal, she said upcoming projects like the Tajpur port and the freight corridor in south Bengal will generate thousands of jobs in the coming days. “You (BJP) are jealous. You can never emulate the work of the TMC-run government. You can only conspire to derail our projects. All the Metro Rail projects in the city were initiated by me (during her stint as railway minister). What was your role in executing development projects of the state?” Banerjee said.

Milk scheme benefits more than 800,000 producers in Rajasthan: Official

OCT 21, 2022

<https://dairynews7x7.com/milk-scheme-benefits-more-than-800000-producers-in-rajasthan-official/>



More than 800,000 milk producers have benefited from a special scheme of the state government, a senior state government official said.

“Milk producers are getting support from the Mukhyamantri Dugdh Utpadak Sambal Yojana (Chief Minister Milk Producers Support Scheme), leading to an improvement in their financial condition,” the official said.

Milk production too has increased and so has the income of those rearing cattle. The state government started this scheme in 2019. Under it, milk producers were being given a subsidy of Rs 2 per litre. In the 2022-23 Budget, the subsidy was increased to Rs 5 per litre and milk producers started getting it from April 1, 2022. More than Rs 600 crore was paid between February 2019 and March 2022 to milk producers associated with cooperative dairies.

It is proposed to give a subsidy of Rs 550 crore to milk producers this financial year.

The state government, to give employment opportunities in milk production, has announced opening 5,000 dairy booths this fiscal year. Of those 1,000 will be given to women and women self-help groups (SHGs). The Rajasthan Cooperative Dairy Federation (RCDF), according to the chief minister’s announcement, has allotted 434 dairy booths till August 31, 2022, including 282 to women and women SHGs.

In 2021-22, against a proposal to open 5,000 dairy booths, the RCDF hit the figure 5,269 by March 31, 2022. Rajni Devi of Rampura Dabdi village, Jaipur district, said she got help from this scheme. The money given under this scheme helps her to purchase cattle fodder and other items for her family.

“This scheme is a boon for cattle rearers,” Rajni Devi said.

Similarly, Rajesh, a milk producer in Khedla village, Dausa district, said his standard of living had improved with the financial subsidy being given by the state government.

At FAO forum, NDDB showcases India’s digital adoption in dairying

OCT 21, 2022

<https://dairynews7x7.com/at-fao-forum-nddb-showcases-indias-digital-adoption-in-dairying/>



India transformed its dairy sector from milk deficiency to becoming the world’s largest producer with the help of technological innovations and bringing people together under a governance structure, Meenesh Shah, Chairman of the National Dairy Development Board (NDDB), said at the Science & Innovation Forum

2022 organised by the Food and Agriculture Organization of the United Nations in Rome, Italy. Shah informed that India contributes 23 per cent of global milk production with an annual growth rate of about 6 per cent, which could be possible “through innovations — technological, scientific processes and more importantly bringing people together and building a governance structure.”

On the sidelines of the World Food Forum, the NDDB Chairman met Beth Bechdol and Maria

Helena Semedo, FAO's Deputy Director-Generals and Thanawat Tiensin, Director, Animal Production and Health Division, to discuss the In-

dian farming system, sustainable livestock production systems and innovations. He said India's manure management initiatives successfully address the cooking gas needs of households.

Addressing north India's burning issue sustainably

OCT 21, 2022

<https://dairynews7x7.com/addressing-north-indias-burning-issue-sustainably/>



The monsoon has receded, and North India is bracing for a smoggy winter. And with that the feverish focus on crop stubble burning has returned to India's public discourse. Like each year, discussions have begun on how bad this year's stubble burning season will likely be and what potential ad hoc techno-fixes could solve the issue — in the short term.

A problem that is historic

We will soon read in-depth analyses of satellite image-derived counts of the number of fires observed on each day, and source apportionment studies that determine the exact contribution of stubble burning to poor air quality. The purportedly apathetic farmer who cares little about the well-being of Delhi's urban citizenry will be held to a high standard of environmental stewardship, and the inevitable political mudslinging will follow soon. However, this heated public discourse adopts an unhelpful adversarial frame to a complex challenge. The problem is a historic one that cannot be fixed with short-term, unsustainable solutions.

The root cause of stubble burning can be traced back to the 1960s-70s, when to meet the urgent challenge of feeding its rapidly growing population, India introduced several measures as part of its Green Revolution. The Green Revolution

transformed the way agriculture was practised, especially in Punjab and Haryana. The economics of high-yielding varieties of paddy and wheat, supported by a guaranteed buyer (the government) and minimum support prices led to a crop duopoly oriented solely around increasing caloric intakes, supplanting the earlier diversity of crops grown in the region.

Further policy moves in subsequent decades, which included the introduction of subsidies for electricity and fertilizers, and ease of access for credit in agriculture only served to cement this duopoly. But this transition to a two-crop agricultural praxis, while filling godowns and feeding mouths, has been depleting the water table, increasing pesticide and fertilizer use exponentially. It has also led to the consolidation of small farms into larger landholdings.

In an attempt to address the growing water crisis, the Punjab and Haryana governments introduced laws around water conservation, encouraging farmers to look to the monsoon rather than groundwater to irrigate their crops. The shortened harvesting season that arose resulting from a not clearly thought-out policy move brought about the need for farmers to rapidly clear their fields between the kharif and rabi crops; the quickest of these ways was to burn off the remaining stubble post-harvest.

The repercussion of stubble burning is felt all through the Indo-Gangetic Plain (IGP) airshed, where what is burned in Punjab and Haryana has an impact on air quality all the way down to Bihar and West Bengal. With studies showing a large contribution of stubble burning emissions

on winter air quality in the National Capital Region, the demand for governments to act on this seemingly avoidable practice translated initially into a criminalisation of the act.

No significant improvement

More recently, however, with concerted focus on the subject, a series of short-term ex-situ and in-situ solutions have been rolled out by the Union and State governments. In-situ solutions include happy seeders and bio-decomposers, while the ex-situ solutions include collecting and using stubble as fuel in boilers, to produce ethanol, or to simply burn away alongside coal in thermal power plants. Economic incentives to reduce burning have also been tested with limited success. With crores invested in these solutions over the last five years, we have yet to see any significant improvement in the situation.

Meaningful steps that are needed

Driven largely by short-term thinking, these techno-fixes or alternative uses work at the margins, without addressing the root cause. As pointed out in a recent article, the entire value-chain of agriculture in the region needs to change if air quality, water, nutrition, and climate goals are to be addressed. In practical terms, this means substantially reducing the

amount of paddy being grown in the region and replacing it with other crops that are equally high-yielding, in-demand, and agro-ecologically suitable such as cotton, maize, pulses and oil seeds. It will also require building trust with farmers to ensure they are seen as partners (rather than perpetrators) and providing them the financial support necessary.

At a policy level, it also requires recognising that agriculture, nutrition, water, the environment, and the economy are all deeply intertwined in the era of the Anthropocene. One cannot be addressed in a silo without having second and third order effects on the other. Therefore, taking the long view on this would also mean establishing a mechanism for intersectoral policy-making that aligns our goals for sectoral policy within the broad frame of sustainable development we wish to follow.

A transition at this scale has not been witnessed since the Green Revolution, but it is what is required if we are to address stubble burning in the long run. Fostering the conditions necessary for such a transition is complex. Whether our institutions have the right mix of political will and professional skill to do so remains to be seen.

Amul set to lead cooperatives' push to promote Indian organic food

October 20, 2022

<https://www.just-food.com/news/amul-set-to-lead-cooperatives-push-to-promote-indian-organic-food/>

India's Gujarat Cooperative Milk Marketing Federation, the owner of major domestic dairy brand Amul, could become the leader of a planned multi-state association of five cooperative bodies promoting organic food. In the coming winter session of the Indian parliament, the central government is planning to table legislation that would authorise the creation of national cooperative bodies. So far, co-

operative societies have operated under the authority of India's state governments. The central government has said the law would promote transparency and accountability within Indian national cooperative societies, making it easier for them to do business.

Amul managing director R. S. Sodhi told Just Food the company would not be merged with the other co-ops, which are: the Indian Farmers

Fertiliser Cooperative Limited (IFFCO); the National Agricultural Cooperative Marketing Federation (NAFED); the National Cooperative Development Corporation (NCDC) and Krishi Bhartiya Cooperative Limited (KRIBHCO).

“There is a new multi-state cooperative society being floated for managing the supply chain of organic products from India. Amul is the market leader in the consumer food segment and its knowledge and expertise will be used to promote Indian organic agriculture products,” So-dhi said.

“The Gujarat Cooperative Milk Marketing Federation started [the milk cooperative movement] with two villages and today we have 18,500 co-op societies of milk producers [as members]. We are happy to share our expertise in the field of cooperatives.”

Dr Chetan Narke, director of trade body the Indian Dairy Association, outlined what he saw as the benefits of the planned move. “The proposed multi-state cooperative society is good if it is specifically aimed at export and technical

enhancement because it would bring foreign currency into India, which will directly benefit the owners of the cooperative society – that is farmers.”

While India is the largest milk producer in the world, it cannot export much of its surplus milk as it does not meet international standards. “If we scale up our milk farming methods, we can increase milk production by 15-20%, which is what the government is banking on,” Dr Narke said.

Kuldeep Sharma, founder of consultants Suruchi Dairy Advisors, believes the proposed multi-state cooperative society would not result in central government interference in the day-to-day functioning of the independent Amul cooperative movement and saw an upside for the business.

“If this helps Amul get a better market in Sri Lanka where Indian dairy products have not reached to [the export sales] level reached in other neighbouring countries, then probably it [the initiative] is good.”

Dairy push: Milkfed eyes Capital gains with Verka outlets

OCT 20, 2022

<https://dairynews7x7.com/dairy-push-milkfed-eyes-capital-gains-with-verka-outlets/>



To augment milk supply to Delhi from currently 30,000 litres to 2 lakh litres; open Verka booths across national capital.

Punjab State Cooperative Milk Producers Federation Limited, popularly known as Milkfed, has inked an agreement to launch its Verka brand of milk and milk products in Delhi, said chief minis-

ter Bhagwant Mann, who was in Ludhiana to inaugurate the newly built Verka milk processing and butter plant on Wednesday.

Mann said that Milkfed — the leading cooperative of the state — will augment the milk supply to Delhi from currently 30,000 litres to 2 lakh litres, thereby benefitting the farmers and milk producers of the state. “This is a revolutionary step aimed at supplementing the income of the farmers to bail them out from the agrarian crisis,” he said.

“According to the agreement, Verka will open new outlets at every nook and corner of Delhi to supply milk and milk products in the national

capital. The sole aim of the government is to extend maximum support and best prices to the dairy farmers of Punjab by following the true essence of cooperation,” he added.

The newly launched plant, which was inaugurated on the Ferozepur, has been constructed at a cost of ₹105 crore. Mann said the plant’s milk processing capacity is 9 lakh litres daily with 10 metric tonne butter handling capacity. The CM said that farmer-friendly schemes should be implemented so as to boost the dairying business amongst the youth to make them financially independent and self-reliant. Mann also said that he has asked Milkfed to further launch an aggressive marketing campaign to capture a sizable chunk of consumer market not only in the state but across the country and even abroad. He said this leading state cooperative has a perceptible presence in the domestic market as Verka is a household name in the region.

The CM said that Verka products like ghee, milk, butter, lassi, kheer, curd, ice-cream, sweets have already created a niche for themselves in the nationwide market which could further be widened with concerted efforts.

CM asks farmers to shun stubble burning

He exhorted the farmers to refrain from burning paddy straw as it poses a serious threat to human life by environmental pollution. He said that in a step aimed at wiping out the menace of paddy straw burning from the state, India’s largest Bio Energy plant has been constructed in Sangrur at a cost of ₹230 crore over 20 acres. Mann said this is largest biofuel (Biomethane/ Bio-CNG) production units in India with 33 TPD (tons per day) adding that the annual straw consumption in this unit will be 1.30 lakh ton adding that it will help in solving the vex problem of paddy straw burning.

NSO report shows cattle dung is more ‘precious’ than fodder

OCT 20, 2022

<https://dairynews7x7.com/valuable-waste-nso-report-shows-cattle-dung-is-more-precious-than-fodder/>



The gross value of output (GVO) of cattle dung estimated at ₹34,825.75 crore is more than the total value of the fodder that the cattle population consumes. Not only fodder but there are also 128 other items including maize, mustard, onion, potato, eggs, soyabean, tea, coffee and cashew nut whose value is lower than dung.

According to the report, ‘Value of Output From Agriculture, Forestry and Fishing’, released by

the National Statistical Office (NSO) recently, the GVO of dung increased 6.8 per cent to ₹34,825.75 crore in 2019-20 from ₹32,598.91 crore in 2011-12.

Due to a drop in value for two years between 2019-20 and 2011-12, the pace of growth is lower compared to the previous phase of seven years. The GVO of dung had increased 17 per cent to ₹18,797.75 crore in 2010-11 from ₹16,050.86 crore in 2004-05.

In comparison, the GVO of fodder increased not even half a per cent to ₹32,626.09 crore in 2019-20 from ₹32,494.46 crore in 2011-12. In many northern States, including Uttar Pradesh and Rajasthan, farmers faced an uphill struggle to feed their cattle after fodder prices doubled this year

“If prices of one commodity are depressed for long years, they tend to jump abnormally and that has happened with fodder this time,” said Akash Bahuguna of Kanpur, who tracks local commodities prices.

Dung ‘paints’

According to experts, the value of dung will further rise due to initiatives like the Khadi and Village Industries Commission (KVIC) making paint from it. The ‘Khadi Prakritik’ paint, made of cow dung as the main ingredient, was launched by KVIC in January 2021.

The agency was paying ₹5/kg to source the dung, which is the same rate a farmer earns from selling ‘upla’ — a dried and round-sized cake made out of dung. But KVIC hopes to pay ₹10/kg when demand for the paints goes up. Under ‘Godhan Nyay Yojana’, the Chhattisgarh government procures dung at ₹2/kg. Even Prime Minister Narendra Modi during a meeting at a farmer conclave on October 17 mentioned the work being done to make bio-CNG from cow dung.

Dung production estimates

The estimates of the production of dung have been prepared based on the population and evacuation rates of the bovine population. The evacuation rates and population estimates are based on the Integrated Sample Survey (ISS) of the Department of Animal Husbandry and Dairying.

For States which don’t have estimates, NSO has taken the rates of adjoining States along with

the annual estimated animal population to arrive at the dung production estimates.

The value of evacuation/droplets from goats and sheep has been estimated by using the results of a 2013 study by of the Central Institute for Research on Goats and the National Centre for Agricultural Economics and Policy Research. The evacuation rate for goats is 0.3 kg per day and for sheep is 0.8 kg per day. The value of droplets is estimated using the prices of dung and grouped with the estimates of dung.

Bovine population

According to the 20th Livestock Census (2019), the total Bovine population (cattle, buffalo, mithun, and yak) was 30.38 crore (with the cattle population at 19.35 crore and buffalo at 10.99 crore), and increased by 1.3 per cent over the previous census of 2012. There was 14 per cent rise in sheep population at 7.43 crore and a 10 per cent jump in goat to 14.89 crore over the previous census.

Rajasthan continues to be the top State in dung production with a GVO of ₹10,041 crore in 2019-20, but it is lower than the record of ₹10,761 crore in 2016-17. The growth in dung GVO in Rajasthan at 7.2 per cent since 2011-12 is marginally higher than the pan-India growth rate.

On the other hand, Tamil Nadu has seen a nearly 50 per cent jump at ₹1,846.76 crore from ₹1,239.98 crore in nine years. Bihar and Jharkhand, too have registered an impressive 40 per cent and 32 per cent growth, respectively, in terms of the value of dung output.

Dairy Farmers Could Make More Money Off Carbon Than Milk

OCT 20, 2022

<https://dairynews7x7.com/dairy-farmers-could-make-more-money-off-carbon-than-milk/>



Work on [Vir-Clar Farm](#) this time of year is in constant motion. A dairy doesn't have a day off—but fall manure applications means the rhythm is even faster than normal, even with supply chain headaches.

"We've had problems getting some supplies, we've had problems getting parts and products like milking gloves and blood tubes, penicillin now has been a problem; products that I could have never even imagined being a problem getting," says Katie Grinstead with Vir Clar Farm in Fond du Lac County, Wisc.

Grinstead admits she's seen a lot of firsts since 2020, but what may be one of the most challenging pieces is the amount of money she's had to pay up front in order to secure parts and other products she needs on the farm. Another heavy weight isn't just the availability of feed for dairies out West, but the cost of feed products across the U.S.

"Feed costs continue to be our number one expense here at the dairy. Some ingredients have been up as much as 50%," she adds.

Grinstead says across the board, most costs are 30% higher today, forcing the dairy to become even more efficient.

"We've embraced automation in our feed center," she explains. "All of our expensive ingredients are put in bins. We utilize augers and the computer to really only use the precise amount of each ingredient that we need."

Move to Automation

She says the move to more automation has helped produce higher accuracy on the farm, now achieving 98% accuracy every time they

make a batch of feed. That efficiency is helping not only in terms of money savings, but also with their cattle.

Automation is helping address the second biggest cost on their farm today – labor. The dairy is an industry that's been labor tight, even before the pandemic. That's why Vir-Clar Farm has made employee retention a top priority.

"We started a few years ago really focusing on our employees and which employees maybe want to learn and grow and maybe go from being a milker to then grow into being somebody who's in the maternity barn, who then might be the next assistant herdsman," says Grinstead. "That's really helped us maintain employees that have the drive to want to do more."

The dairy also offers a ride service to and from work, as well as a uniform program.

"We like to have fun," she says. "We try to have fun parties, whether it's Christmas or a summer party. We recently had a pizza party to celebrate being done with corn silage. I cook when they're in the fields late, just whatever we can do to try to make it a good work environment for them."

Powering a Community Via Waste

What also makes this dairy farm a leader is how they continue to embrace technology. The farm put in a methane digester in 2004.

"We've been producing electricity for roughly 800 homes a day here utilizing the manure as a fuel source," she says.

Powering a community by what was once considered waste is not only helping the farm's sustainability efforts, but it's also generating additional income.

"We're actually taking something that is considered a waste product to most by producing electricity, separating bedding, the dry solids off for bedding, reducing the odor. We've been doing that already and we're going to take it to

the next step and produce renewable natural energy,” Grinstead says.

Strong Vision for the Future

Dairy’s ability to turn waste into an energy source, is something Elanco, the world’s second largest animal health company, sees as an opportunity.

“There are numerous countries, all parts of the value chain governments that are saying we are going to do something about the climate,” says Jeff Simmons, president and CEO of [Elanco](#).

Simmons not only thinks climate neutrality is possible for the livestock industry, he believes the industry is already well on its way. Simmons says there are four ways farmers can look at not only reducing their environmental footprint, but also cashing in on carbon.

“There’s on the land, what are you doing on the land; no-till, all the different things that are done the land,” he says. “Second, what you do in the animal. That’s where Elanco comes in; the ruminant of the cow. How do we create less methane coming out of that cow by what we do in the cow with nutrition with other things. Third is out in the land is digesters, it’s saying what are we doing with the manure in the waste? And lastly, is what are you doing in the value chain with ESG? Whether that’s purifying water and getting credits from a nestle, or whether that’s some you know, someone that’s trying to target and want that.”

Dairy is the Part of the Climate Solution

Simmons is so confident in livestock’s ability to be part of the climate solution, he thinks dairy farmers could soon make more money off carbon credits than they do off the dairy products they sell.

“It starts when you look at what your is footprint today? How much greenhouse gas are you creating? What are you doing to reduce that? And can you get to a state where you’re actually taking care of all the gas you create where you’re not making any footprint? And that

comes from methane to carbon, etc. So, it is possible because people are getting closer and closer,” says Simmons.

Simmons’ statements aren’t just bold, he says he’s seeing some of the most innovative dairy producers across the country who are less than two years away from making more money off the carbon contracts they sell than the dairy products they produce.

Hungry for Animal Protein

It comes at a time when protein is in high demand, which is a fact Simmons says is often overlooked and under celebrated.

“Animal protein demand continues to grow,” he says. “It’s probably the biggest misnomer, even inside our industry, sometimes. The last 10 years, we have increased 60 million metric tons, the prediction is the next 10 years, we’ll need to get to 90 million, another 50% more growth. Why? There are people in other continents that are increasing their GDP. But the second is, you’re seeing this Western diet, more protein, less carbs. What we produce is under tremendous demand, the fastest growing food segment today is animal protein. When demand is up, you turn and say, ‘Hey, there’s real opportunity here for the farmer to play a role.’”

Supply Chain Impacting Timeline

While dairy leaders like Simmons say livestock producers are part of the climate solution, those on the farm level says supply chain issue are also impacting the timeline to grow renewable natural energy.

“The supply chain has actually slowed that whole process down, that should be up and running,” says Grinstead. “We had equipment and parts and stuff sitting on ships that we couldn’t get here. We’re very anxiously waiting for that project to be done.”

A project driving diversity on Vir Clar Farm could finally cross the finish line in 2023, at a time when livestock producers could be the climate solution.

Arunachal Government Strives To Build robust Infra For Dairy Development

OCT 19, 2022

<https://dairynews7x7.com/arunachal-government-strives-to-build-robust-infra-for-dairy-development/>



The Arunachal Pradesh Government strives to empower farmers by building robust infrastructure for animal husbandry & dairy development.

As a result of its unwavering efforts, residents of Pasighat, Roing, Namsai and Tezu now have access to four veterinary facilities.

Under the 'National Livestock Mission, an eco-friendly sustainable pig farm has also been set up at Berung (Pasighat), Roing & Jomlo (Siang). According to an official bulletin issued by the Arunachal Pradesh Chief Minister Pema Khandu, an eco-friendly and sustainable sheep

farm has been established at Sangti while the Poultry Rearing Centre and Poultry Hatchery Unit have been set up at Nirjuli.

On the other hand, a well-equipped 'Arun Dairy Plant' and an eco-friendly dairy farm have been installed at Karsingsa and Lemberdung in Tawang while the 'Namsai Fresh' Dairy unit has been set up in the Namsai district.

According to sources, the state administration for the moment is primarily concentrating on livestock raising and selective breeding, fostering sustainable growth and assisting to generate a better livelihood for the farmers.

These initiatives by the State Government have helped to augment farmers' revenue and increase nutritional values and have also set an example through sustainable farming methods.

Self-sufficiency in dairy sector: 'Rs 25.3 lakh tonnes of milk produced in Kerala last year'

17th October 2022 03:28 AM

<https://www.newindianexpress.com/states/kerala/2022/oct/17/self-sufficiency-in-dairy-sector-rs-253-lakhtonnes-of-milk-produced-in-keralalast-year-2508871.html>



KOZHICODE: Public Works Minister P A Mohamed Riyas on Sunday said Kerala will soon achieve the goal of self-sufficiency in the dairy sector. He was inaugurating the dairy farmers meeting jointly organised by the dairy development department, Kozhikode corporation, and block panchayat at the Nadvattam Crown Auditorium.

Last year, the annual milk production in the state was 25.3 lakh tonnes. The dairy sector has been able to provide employment to lakhs of people in the villages and increase the income of the rural families, the minister said. The state government has formulated and implemented many schemes for the development of the sector.

The minister said the state gives a high price for the milk procured from the farmers. Standing committee chairperson of the city planning corporation Krishnakumari presided over the function. Block panchayat president Sajitha Pookadan, corporation tax appeal standing committee chairman P K Nassar, and others participated.

41 per cent milk samples found substandard in Punjab

Oct 17, 2022 01:41 PM (IST)

<https://www.tribuneindia.com/news/punjab/41-milk-samples-found-substandard-in-punjab-441963>



The use of unsafe milk and indiscriminate use of aluminium leaf (vark) to decorate sweets has posed a big health challenge in the state during the ongoing festival season. As per a report prepared by the state's Food and Drug Administration (FDA), 41 per cent of the milk samples were found substandard. In the past two months, the FDA has collected 676 milk samples, of which 278 were found unsafe. A significant number of substandard samples were found unsafe for human consumption as many of them were adulterated with edible oil.

The use of aluminium leaf instead of pure silver leaf, which is commonly used for decorating sweets, has also emerged as a major health challenge. In this month, as many as 164 samples were collected across the state to check the quality of silver leaf.

The FDA officials said though the collected samples were still being examined in a laboratory, it was common that many of the collected samples were of aluminium instead of silver. According to experts, consuming aluminium is a serious health hazard. As per the Food Safety and Standards Authority of India (FSSAI) standards, the use of aluminium is unsafe for human consumption.

The FDA also laid special emphasis on checking the quality of dry fruits. Over 100 samples have been collected so far for the same.

Punjab's Commissioner for Food and Drug Administration Dr Abhinav Trikha said following the FSSAI standards, they had launched special campaign to check use of silver paper, milk and quality of dry fruits before beginning of the festival season.

"In August, we launched a week-long special campaign to check the practices of adulteration of milk and every district was assigned to take at least five samples of milk daily," he said.

25.3 lakh tonnes of milk produced in Kerala last year-Self sufficiency

OCT 17, 2022

<https://dairynews7x7.com/25-3-lakh-tonnes-of-milk-produced-in-kerala-last-year-self-sufficiency/>



Public Works Minister P A Mohamed Riyas on Sunday said Kerala will soon achieve the goal of self-sufficiency in the dairy sector. He was inaugurating the dairy farmers meeting jointly organised by the dairy development department, Kozhikode corporation, and block panchayat at the Naduvattam Crown Auditorium.

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Mother Dairy raises milk prices by ₹ 2 per litre on select variants

OCT 16, 2022

<https://www.businessinsider.in/business/news/mother-dairy-raises-milk-prices-by-2-per-litre-on-select-variants/articleshow/94882970.cms>



After Amul, another dairy major Mother Dairy has raised its milk prices by ₹ 2 per litre on full cream and cow milk variants with effect from Sunday (October 16). A Mother Dairy spokesperson said that the dairy industry has been experiencing a consistent surge in raw milk prices, which has increased by about ₹ 3/kg in the last two months

alone, owing to multifold increase in varied input costs.

"Increased fodder prices and low rainfall in some northern states have aggravated the situation. We are therefore compelled to revise prices to support farmers and ensure availability of quality milk for consumers," he said. Earlier, during the day, the Gujarat Cooperative Milk Marketing Federation (GCMMF), which sells milk and milk products under the brand name 'Amul' had announced raising the rates of full cream milk and buffalo milk by ₹ 2 per litre amid the festive season. The price of full cream milk has increased from ₹ 61 per litre to ₹ 63 per litre.

Both the major dairy brands, Amul and Mother Dairy had in August hiked milk prices by ₹ 2 per litre to compensate the increase in procurement costs.

LSD: Testing times for dairy farmers, vax makers

October 16, 2022

<https://www.thehindubusinessline.com/opinion/lsd-testing-times-for-dairy-farmers-vax-makers/article66018435.ece>



Lumpy Skin Disease (LSD) is a viral outbreak in cattle and buffalo and spreads through biting insects (mites, ticks, flies and mosquitoes), direct contact with an infected animal, nasal discharge and sharing of infected equipment (including syringes).

Initially reported in African countries, the disease was first reported in India in 2019, in Jharkhand. Since then, several States, especially Gujarat, Rajasthan, Haryana and Punjab, have reported the outbreak. And it is spreading fast to other States.

Morbidity could be 50-100 per cent, and mortality is usually low — up to 1 per cent. But recent outbreaks in India have shown mortality of up to 10 per cent. The incubation period is 4-12 days, while the infection lasts for around 28 days.

The younger cattle and buffalo are more severely affected. They get multiple nodules on the whole body, besides discharge from eyes and nose, high fever and lethargy, drop in milk production, loss of appetite, weight loss, possibility of abortion and intrauterine infection, and temporary or permanent sterility in bulls and cows.

The economic impact of LSD is high, comprising treatment costs, reduced milk production, and

loss due to abortion, infertility and death. More particularly, it is the poor farmers who suffer these losses. There is no specific curative treatment. Post the disease, secondary infections in the skin may be treated with Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), antibiotics and anti-allergic drugs.

The only solution

Vaccination is the only solution for prevention. As per recent government advisory, immunisation against LSD could be done through vaccination of cattle and buffalo with Live Goat Pox Vaccine (Uttarkashi strain).

Further, the prophylactic dose of the vaccine should be 1ml of Goat Pox vaccine whereas it could be 3ml in ring vaccination of an affected area. It should be administered by subcutaneous route.

Currently, Gujarat-based Hester Biosciences and Hyderabad-based NDDDB arm, Indian Immunologicals Ltd (IIL) make the Goat Pox Vaccine in India. The technology has been acquired from Indian Veterinary Research Institute.

The target population for LSD vaccination is around 25 crore. Reports suggest that the Centre and States have already vaccinated six crore of them.

LSD is a new challenge facing the livestock sector. Livestock keepers will have to vaccinate their cattle and buffalo every year with either the current Goat Pox Vaccine or the new LSD vaccine which is yet to be commercialised.

The writer is CEO and MD, Hester Biosciences Ltd

Global News

Consumer perceptions of plant-based milk alternatives

OCT 31, 2022

<https://dairynews7x7.com/consumer-perceptions-of-plant-based-milk-alternatives/>



What motivates consumers' choice of dairy milk products over plant-based milk alternatives? In a recent survey, researchers from the North Carolina State University found that most consumers (73%) associate dairy milk with positive attributes compared to those with a positive association with plant-based milk alternatives (14%).

While dairy product consumption is motivated by both familiarity and habit, the present-day world shows that consumers who are conflicted or uncertain about dairy consumption can change their opinions based on marketing or educational messaging. Therefore, understanding how consumers perceive dairy milk and other dairy foods enables the development of dairy-positive messaging that aligns with their perceptions.

On the other side, consumer understanding of health and sustainability as they apply to the dairy category is complex – the reason why consumer messaging and education regarding the nutritional advantages of dairy as well as sustainability efforts and progress by the dairy industry are needed to keep the consumption of dairy products afloat.

The survey

To investigate parents' implicit and external attitudes toward dairy milk and plant-based milk alternatives (PBA), a 2-part study was conducted. First, parents completed an online survey to determine their preference for either dairy milk or PBA. A subset of participants was

then invited to one-on-one in-depth follow-up interviews to understand explicitly stated purchase motivations and guided recall of information heard about dairy milk and PBA to better understand external influences on milk perception.

Results of the survey

Most parents (73.4%) implicitly associated dairy milk with positive attributes compared with those with a positive association with PBA (13.8%) or with a neutral bias (12.7%). The stronger a parent's implicit bias toward PBA, the more likely they were to purchase these products either alongside or as a replacement for dairy milk.

A total of 85% of parents in this study could recall drinking milk at home as a child, and 58% remembered encouragement from their parents to drink milk. However, only 38% encouraged their own children to drink milk (the majority, or 55%, were neutral toward their children's milk consumption). It was highlighted that, generally, negative media messaging toward dairy milk and positive messaging toward PBA may contribute to this trend, even if consumers are not explicitly aware of their perception changes.

On the other hand, 77% of parents felt generally confident in choosing dairy milk or PBA for their children. Only 26% of parents felt that nothing about dairy milk or PBA information or messaging was confusing. The researchers found that sources of uncertainty about dairy milk included hormones and antibiotics, animal welfare, ecological sustainability, potential contamination, and intolerances or allergies. It was painted clear that by addressing the most encountered and recalled concerns about milk from parents, dairy producers may be able to

increase trust and implicit bias toward dairy milk compared to PBA.

The researchers advised careful consideration be taken when planning dairy marketing messaging to ensure conventional dairy sales (and the industry as a whole) are not harmed while attempting to keep dairy competitive against plant-based alternatives.

“Understanding consumers’ perception of and purchase intent for milk and milk alternatives is a key issue for strategically positioning dairy in a changing marketplace,” they said.

Opinions on plant-based milk alternatives

In a report, researchers from the Institute for Food Safety and Health (IFSH), analysed a selection of plant-based dairy alternatives including almond, cashew, coconut, hemp, oat, pea, rice, and soy, all marketed under various trade names. Following their analyses, interesting comments popped up.

“It is certainly worth checking the labels on plant-based milk alternatives since some are sweetened and contain added sugars, and many are low in protein,” said Dr Reeves, the head of Undergraduate Studies and Student Experience at the University of Roehampton. “Furthermore, plant-based milks can be low in calcium,

iodine, and vitamin B12 – nutrients that are normally found in cow’s milk – so have a look at the label to see if they are fortified. In my opinion, I’d opt for the milk that you enjoy most (taste-wise), and what fits into your own individual goals and situation.”

Concluding on their study published in the journal Food Research International, researchers from Cidade University in Brazil said, “plant-based alternatives can be considered a substitute for cow’s milk, but there is a need for its fortification so that its composition and nutritional quality are close to those of cow’s milk. There is also a need to ensure the palatability and acceptability of this milk substitute for the population.”

In line with this observation, researchers of the current survey commented that studies show that plant-based milk alternatives may serve a similar dietary role as dairy milk, but they are not nutritionally equivalent. “Most PBAs lack the vitamin and protein content of dairy milk, are not nutritionally complete protein sources, and have lower protein digestibility-corrected AA scores than their dairy counterparts,” they said.

Growth opportunities in the dairy sector

OCT 28, 2022

<https://dairynews7x7.com/growth-opportunities-in-the-dairy-sector/>



Consumers may be tightening their belts, but there are still plenty of opportunities for dairy suppliers to increase sales.

The cost-of-living crisis in the UK is having a significant impact on how consumers are choosing to spend their money. During 20-31 July 2022, 89 percent of British adults said expenses had increased, with 94 percent naming groceries as a reason, 1 indicating plans to adopt more frugal approaches where possible.

The food and drink sector can take some comfort in the fact that people are initially cutting non-essential spend, eg, reducing fuel usage and holidays, but it is still concerning to hear

that more than one-third (35 percent) already find it necessary to spend less on food and other essentials.²

Despite consumers looking to reduce grocery bills – which will naturally affect all purchases – there are still opportunities across the food and drink sector, including for dairy suppliers. In fact, research shows there are significant opportunities for the sector throughout the global market.

The dairy superfecta

Dairy caters to four major consumer requirements: fat, protein, provenance and safety. Although their prominence varies across regions, there is often overlap. Connecting multiple trends simultaneously can help improve the chances of successful growth within a particular market.

While consumers have previously avoided saturated fats, experts have recently exonerated

dairy fat. This, combined with new research about the negative impact of sugars on our overall health, has caused some consumers to look for more high-fat/low-sugar products. The idea that dairy fats aren't as unhealthy as once believed has also given rise to the notion of 'permissible indulgence'. Wording such as 'rich', 'creamy' and 'indulgent' appeal to consumers who want something that feels like a treat without having a negative impact on health.

Protein is widely understood to be critical to overall health and weight management – especially to consumers interested in increasing their muscle mass. There has been significant growth in this area; from 2016 to 2020 the number of global product launches with messages centred around protein increased by 9.45 percent.

China's Appetite for Consumer Dairy Products Grows

OCT 27, 2022

<https://dairynews7x7.com/chinas-appetite-for-consumer-dairy-products-grows/>



China's economic growth has slowed dramatically from pre-pandemic gains as the country continues to implement Covid restrictions. China's appetite for some dairy products, however, has grown as consumers look to value-added products and the country's pork industry recovers following devastating outbreaks of African swine fever that began in 2018.

According to Sarina Sharp, analyst with the Daily Dairy Report, China imported healthy volumes of cheese and butter last month. Cheese imports were up nearly 23 million pounds in September, a 7% rise from September 2021, while butter imports grew by 13.8 million pounds, up 47% from the previous year, according to Trade Data Monitor.

"For both cheese and butter, China imported more last month than in any other September, which suggests that demand for dairy is resilient, despite concerns about the Chinese economy," Sharp said.

Growth in China's third-quarter gross domestic product (GDP) of 3.9%, increased by 0.4 percentage points from the second quarter but was

still well below the country's target growth of 5.5%.

The other dairy product that China imported in large volumes in September was whey. These imports climbed more than 11% compared to a year-earlier to 138 million pounds.

"China's whey imports in September were the highest volume in 14 months," Sharp said. "Better margins for hog producers have propelled China's whey imports above prior-year levels for two straight months."

Year-to-date whey shipments to China from all suppliers through September were still about 25% lower than the same period in 2021. However, U.S. shipments of whey to China for the same nine-month period set a new high due to August's record-breaking dry whey exports to China of 74.4 million pounds, she said.

After building stocks in 2021, China has been scaling back on milk powder purchases since February. According to Trade Data Monitor,

China imported 66.3 million pounds of whole milk powder (WMP) in September, down 16.2% from September 2021, and 55.3 million pounds of skim milk powder (SMP), off 17.8% from the previous year. China's year-to-date imports through September of both WMP and SMP now trail 2021 imports by nearly 17%.

"New Zealand remains China's top supplier of WMP, but its share of the market dropped below 80% in August and September, implying that Kiwi milk powder stocks were likely running low ahead of the 2022-23 season," Sharp said. New Zealand share of China's SMP market has also declined. The country accounted for just 15% of China's SMP imports in September, dropping behind Australia and the United States in market share.

Looking ahead, Sharp said economic concerns and China's ongoing Covid restrictions as well as its sweeping lockdowns could continue to chip away at demand.

Local dairies lauded for greenhouse gas reductions

OCT 27, 2022

<https://dairynews7x7.com/local-dairies-lauded-for-greenhouse-gas-reductions/>



Several Westside dairies were awarded sizeable grants from the California Department of Food and Agriculture for their work in reducing greenhouse gas emissions.

The California Department of Food and Agriculture announced recently that it has awarded \$37.65 million in grant funding to 41 methane

reduction projects across the state. These projects, part of the Alternative Manure Management Program and the Dairy Digester Research and Development Program, will reduce greenhouse gas emissions from manure on California dairy and livestock farms. The projects will contribute \$74.1 million in matching funds.

These grants enable recipients to improve their manure management practices and are anticipated to result in a total estimated annual greenhouse gas reduction of 233,393 metric tons of carbon dioxide equivalent.

"Methane is one of the most potent greenhouse gases there is, but it's also one that we know how to reduce," said CDFA Secretary Karen Ross. "The projects funded through AMMP and DDRDP today will have an important impact on California's methane emissions and help us

meet our SB 1383 target of a reduction of 40 percent below 2013 levels by 2030 — among the most ambitious goals in the world.”

Among the statewide recipients, were five Westside dairies.

Under AAMP, Lopes Family Dairy and Monster Dairy, both in Newman each requested and received \$750,000 for their projects. Lopes Family Dairy is contributing \$196,849 in matching funds for the project described as a compost bedded pack barn. The project is expected to reduce greenhouse by 11,875 metric tons of carbon dioxide equivalent.

Monster Dairy is contributing \$24,393 to a project described as solid separation. It is estimated to reduce greenhouse gas emissions by 5,042 metric tons of carbon dioxide equivalent. D&D Holsteins in Gustine also got \$750,000 under AAMP for a solid separation project. They are contributing \$30,347 and are expected to reduce emissions by 10,179 metric tons of carbon dioxide equivalent.

Under DDRDP, two projects submitted by California Bioenergy LLC for two Gustine dairies were awarded grants. The project of Martins View Jersey Dairy Biogas got \$818,215 to add to the \$5.9 million matching fund. Their expected reductions are 81,822 metric tons of carbon dioxide equivalent.

The Bar mac Dairy Biogas project was awarded \$912,352 to add to the \$6.8 million matching fund for an expected reduction of 91,235 metric tons of carbon dioxide equivalent.

Dairy manure produces methane when it decomposes. Methane is a powerful GHG that traps 25 times more heat in the atmosphere

than carbon dioxide within a 100-year timeframe, contributing to global warming. Dairy digesters help capture methane emissions and use them to produce electricity or natural gas. Alternative manure management practices such as scrape collection instead of flush or solid separation so more manure is handled in a dry form also help to significantly reduce methane emissions.

Implementing these practices can also provide other important co-benefits such as reducing odor and certain air pollutants like reactive organic gases or nitrogen oxides (NOx), improving the efficiency of water recycling and reuse for irrigation, and producing compost from manure solids that can be used for fertilizer and animal bedding.

This latest round of grants brings the total of AMMP and DDRDP projects to 273 since 2015. Together, these projects are anticipated to reduce an estimated 2,555,727 metric tons of GHGs per year, which is equivalent to removing more than 550,600 cars from the road.

In addition to these investments, CDFA partnered with the California Dairy Research Foundation on a proposal that was recently awarded a grant of up to \$85 million by USDA through its Climate Smart Commodities Program. This award will support AMMP-related projects and activities focused on building climate-smart dairy markets and provide financial incentives for California dairy producers to reduce both methane emissions and nitrogen surplus. These projects will also leverage matching funding from non-federal sources.

Milk prices are projected to increase by 28% this year. What's driving costs?

OCT 25, 2022

<https://dairynews7x7.com/milk-prices-are-projected-to-increase-by-28-this-year-whats-driving-costs/>



At the end of 2021, the cost of a litre of home-brand milk in an Australian supermarket was about \$1.30. It's now about \$1.60.

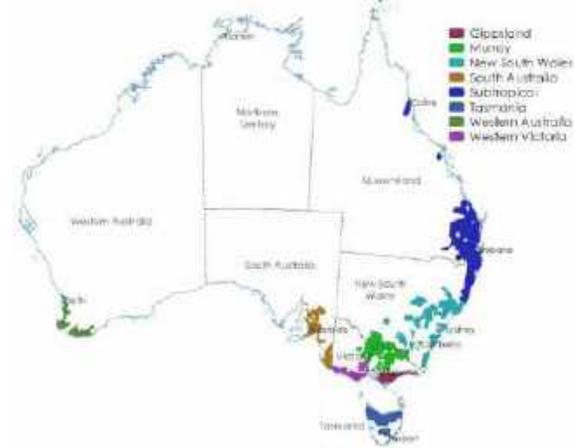
What will it cost at the end of 2022? That depends on the continued effect of flooding on prime dairy-production regions in New South Wales, Victoria and Tasmania, as well as on global economic conditions.

The Australian Bureau of Agricultural and Resource Economics and Science has projected a 28% increase in the farm-gate milk price in 2022-23 — to 72.5 cents per litre, a record high. With less milk being produced, it could be even more.

It's a case of higher demand and lower supply. Production has been declining since 2014. In the first half of 2022, ABARES says milk production was about 7% lower than the same period in 2021:

This was driven by extreme weather events: a drier than average start of the year in southern Victoria and northwest Tasmania, flooding in regions of Queensland and northern New South Wales. Also, with export prices for Australian dairy products increasing substantially at the start of 2022, less milk was available to the domestic market.

Obviously, things aren't all rosy. Some dairy farmers face the devastation of natural disasters. All face the same post-COVID challenges as other primary producers. Russia's war on Ukraine has helped drive up costs of inputs, from fertilisers to feed. Labour is hard to find.



ABARES, CC BY-NC-ND

But for all that, the record-high farm-gate price is good news for an industry where the number of farmers has declined by a quarter in the past decade (from about 7500 in 2011 to about 5,700 now).

Deregulation stirs the pot

Until 2000, farm-gate milk prices were regulated. State and territory governments set minimum farm-gate prices that maintained farmer income.

This was abandoned in July 2000. With deregulation, farmers, processors and supermarkets were set free to negotiate prices.

In economic theory, free trade works fine when you have a large number of buyers and sellers, all with the same amount of information about what is happening in the market.

But in the milk industry, thousands of producers sell to a handful of milk processors, who then sell to even fewer retailers. The major supermarkets control almost 60% of total milk sales.

This is not always such a problem. It is not often you hear fresh producers screaming at supermarkets, in what is a very similar arrangement. But with the dairy industry, as noted in a [2021 report](#) from the Department of Agriculture, Waters and the Environment, there is a “perceived market failure”.

Why? It has to do with how supermarkets have used their power.

Waging the milk price war

To give time for the market to find an equilibrium, the Howard government introduced a “Dairy Adjustment Levy” of 11 cents per litre to support farmers through deregulation. This levy remained in place until 2008, when it was abolished by the Rudd government.

Then, in 2011, the “milk war” broke out. Coles had the idea of luring shoppers from Woolworths by selling milk at \$1 a litre. Woolworths responded. Aldi joined the move. And the war kept prices artificially low for almost a decade. Supermarkets put the squeeze on processors, who had little option but to accept what was offered for crucial supermarket contracts. Processors then put the squeeze on farmers.

Putting the squeeze on milk prices

Consumer Price Index compared with milk price index (December 2010 = 100)

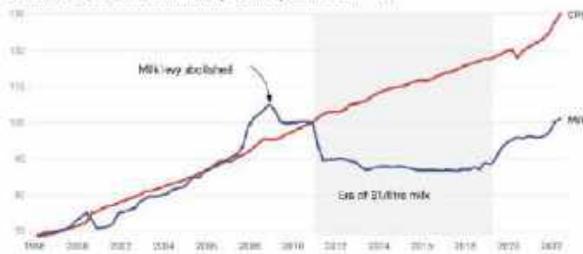


Chart: The Conversation Source: Greg Jericho/The Guardian

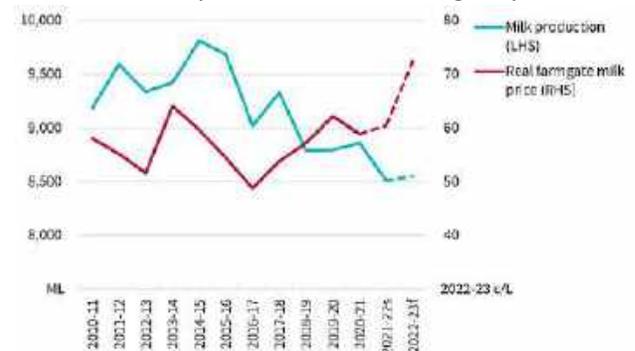
Many decided the effort was not worth it, and quit farming. Milk production peaked in 2014 then declined.

Supermarkets finally abandoned \$1/litre milk in 2019, under considerable public and political pressure to acknowledge that, after eight years

with no increase, some rebalancing was needed.

During this time, overseas demand for dairy products has also been increasing, especially in Asia. Now about 32% of Australian dairy production is exported – not as fresh milk, but as cheese, butter and other dairy products. (It takes about 10 litres of milk to make 1 kilogram of cheese, and 20 litres to make 1kg of butter.) On top of that, lately US and European dairy farmers have had a hard time with drought, increasing international prices. The United Nations’ Food and Agriculture Organization’s Dairy Price Index increased by more than 17% from 2020 to 2021 and is expected to rise another 15% by the end of this year.

Australian milk production and farm-gate price



ABARES; Dairy Australia

The projected 28% rise in farm-gate milk prices in 2022-23 will bring the value of Australian dairy production to a record \$6.2 billion. Which is good news for the long-term sustainability of dairy farming in Australia. You might not appreciate it, but to keep dairy farmers in business, a fair price must be paid for your fresh milk.

Source : Smart Company Oct 24 2022

Flavio Macau is an associate dean in the School of Business and Law at Edith Cowan University, and Amy Cosby is a research fellow — agricultural education and extension at CQUniversity Australia.

Dairy sector urges investment in R&D

OCT 24, 2022

<https://dairynews7x7.com/dairy-sector-urges-investment-in-rd/>

Pakistan's processed dairy sector is facing challenges in improving supply chain at a time when the livestock and agriculture sector of the country is in deep waters.

According to stake holders, the country was already ranked as 'low-productive' when it comes to measuring per-animal yield.

In milk production, however, despite being the third-largest producer of milk, we have an annual production of 65 billion litres

FrieslandCampania Engro Pakistan (FCEP) General Manager Milk Procurement Zeeshanur Rub says, "We have 97 million plus animals and billions of dollars could be earned by developing even one-third of the livestock sector on scientific lines."

During a visit to the company's Sahiwal plant, the GM said that, "The average milk yield of a cow is less than 14 litres per day as against the global standards of 30 litres."

He highlighted that low productivity of milking animals, high input costs, the prevalence of diseases, lack of cold chains, formal marketing system, and credit support to small farmers were all key challenges faced by the dairy sector.

"Cost-effective short and long-term strategies can enable the predominantly informal sector to play its due role in the revival and sustainable growth of the economy," he said. "Among the existing production, only 3% is processed, 15% makes the losses, 35% is being sold as loose milk and the rest goes to the sweet markets, farmers' retaining and others," said Zeeshan. As per details, the national average of milk production coming from buffalos and cows is 55 million tonnes. The estimated milk potential and maximum breed potential at the research station are 82 million and 110 million tonnes, respectively.

"The Friesian and Sahiwal cows produce 2,000 litres of milk/lactation in 1910. Now, Friesian

cow milk production has increased to over 9,000 litres/lactation while the Sahiwal cow milk production is stagnant at 2,000 litres/lactation. The major difference between both is the lack of research and development," he said.

According to dairy sector experts, countries equipped with advanced research and development are leading milk producers with a fewer number of milking animals but higher yields. Israel and South Korea lead the world with 5% of the GDP research and development expenditures. Pakistan is ranked 97 among 141 countries, reflecting exceptionally low priority being given to research and development.

With the dairy industry processing only 3% of milk production, experts believe that increasing the share to 15-20% can help overcome the prevailing economic crises. Pakistan has great potential to export value-added milk products like cheese, butter and desi ghee.

"Apart from low yield, the sale of loose milk is the main hurdle in the development of the dairy sector," Zeeshan added.

"The local breed of cows produced even less than half produced by the imported cows," he lamented. A major reason behind why farmers prefer western breeds.

"There is a dire need to focus on small farmers constituting 97% of the total market. Collaboration of the government and private sectors can bring about a revolution in the lives of over 50 million people directly linked to the dairy sector," he said. The FCEP GM also believed that the loss of over 0.75 million animals in the recent floods, and the casualties incurred due to the lumpy skin disease, posed a major challenge to the sustainability of the existing milk market. "The recent floods have washed away standing crops which could lead to fodder scarcity, especially in Sindh," he added.

Plan for home for farmer on St Martin plot gets backing

20 October 2022

<https://jerseyeveningpost.com/news/2022/10/20/plan-for-home-for-farmer-on-st-martin-plot-gets-backing/>



A NUMBER of States Members have backed proposals to construct a home for a well-known dairy farmer on a plot of unused land in St Martin.

The plans include building a two-bedroom property on the land to the north of Field MN685A on Rue de Champ Colin, which would act as a home for Becky Houzé, who is the co-owner of nearby Lodge Farm. Her family have farmed in the area for almost 80 years.

In a submission to the government's Planning website, Grouville Constable Mark Labey has urged officers to approve the application.

'We must support our rarest breed in this island, and that is our young farmers, who are on the verge of extinction,' he said.

'They will be providing us with our food security in the future in the case of a civil emergency and they are the last custodians of our beautiful countryside. Without them there will be no more resistance to total urbanisation,' he added.

Infrastructure Minister Tom Binet said that Ms Houzé's continuing farming was 'imperative for the future of the dairy industry and the food security of the Island'.

'It is in the interest of the Island as a whole to support those vital to the survival of the agricultural industry and those allowances permitted by Planning should be used to good effect,' he said.

'It is clear to me that the location of the proposal is wholly reasonable. The plot has no agricultural value. The purpose of the restriction on building on green fields is to protect land that is necessary for farming. As the proposed plot cannot be farmed, you would be hard pressed to find a more suitable plot in the area, a mere 1km from the main farmstead,' he added.

Grouville and St Martin Deputy Steve Luce, who is also a member of the Planning Committee, said: 'The site is not isolated on its own in the middle of the countryside, but sits alongside existing buildings. It could easily be seen as a natural extension to the existing Maufant Village envelope.

'The site area that is the subject of this application has been a dumping ground for many decades, and its restoration to something more useful and environmentally friendly seems like an eminently sensible area.'

The application has also received letters of support from Jersey Business, the States veterinary officer and Jersey Dairy.

1,000 Litres Of Adulterated Milk Discarded

October 19, 2022 | 07:00 PM

<https://www.urdupoint.com/en/pakistan/1000-litres-of-adulterated-milk-discarded-1580962.html>

PESHAWAR, (UrduPoint / Pakistan Point News - 19th Oct, 2022) :District administration Mardan discarded 1,000 litres of adulterated milk and initiated legal proceedings against involved persons on Wednesday. Deputy Commissioner (DC) Mardan, Habibullah Arif had received public complaints regarding sale of adulterated milk in the district, which prompted him to direct action against adulterators.

On the directives of the Deputy Commissioner, the Additional Assistant Commissioner (AAC), Ghari Kapura, Abdul Maqsat along with a team of the District Director Livestock and personnel of the concerned police station rushed to Baghicha Interchange on Swat Expressway and took a vehicle loaded of milk and conducted analysis of the milk.

The test confirmed mixing of more than 23% water in the milk, which is injurious for human health.

Dairy Reportedly Bad for the Heart – Don't Lump Milk and Cheese Together

OCT 19, 2022

<https://dairynews7x7.com/dairy-reportedly-bad-for-the-heart-but-dont-lump-milk-and-cheese-together/>



For people with established cardiovascular disease (CVD), greater consumption of various dairy products was associated with worse health outcomes in a Norwegian study.

Rising daily intakes of total dairy and milk were each significantly associated with increased risks of stroke, cardiovascular mortality, and all-cause mortality over follow-up generally spanning 5 to 14 years in patients with stable angina, according to clinical dietitian Vegard Lysne, PhD, of University of Bergen and Haukeland University Hospital, and colleagues.

Acute myocardial infarction (MI) had no clear linear relationship with total dairy intake or milk consumption, but the risk was increased with butter exceeding 2 g/1,000 kcal in a person's daily diet.

Likewise, data were inconclusive regarding cheese consumption and cardiovascular risk, as higher cheese intake had no significant associations with acute MI, stroke, CVD mortality, or all-cause mortality, the study authors reported in the European Journal of Preventive Cardiology.

Thus, the study draws a more complicated picture of dairy's risks that supports other observational data suggesting that different dairy products may have different effects. "We can speculate that at least part of the differential associations seen for milk, butter, and cheese may be because cheese contains intact MFGM [milk fat globule membrane], while milk and butter does [sic] not," Lysne's team wrote.

Yet overall, dairy is "probably harmful," the cheese verdict unclear, and some of the fermented dairy products may be less dangerous if dairy is to be consumed at all, commented Andrew Freeman, MD, a cardiologist at National Jewish Health in Denver, who was not involved with the study.

Even without a randomized trial, Freeman said in an interview, “there’s enough signal in the noise to draw the conclusion that higher-fat dairy products, the number one source of saturated fat in our diet, are probably not going to be helpful to human health, and heart health in particular.”

He cautioned that there may be worldwide variation in dairy’s effects, however. Dairy products may be different between countries that place more restrictions on raising cattle with certain chemicals, like growth hormones, and those that don’t. For instance, the U.S. permits recombinant somatotropin treatment of dairy cows, unlike the European Union, Australia, and Japan.

Nevertheless, the large PURE study of people around the world consistently found the best clinical outcomes in those who ate a balanced diet including lots of fruits and vegetables and a modest amount of dairy, unprocessed red meat, and nuts and legumes. The PURE investigators had separately challenged the association of fats (including saturated fats) with mortality and also reported that compared with no dairy, eating at least two servings of it per day was linked with less CVD and mortality. Current U.S. dietary guidelines recommend a few servings of low-fat or fat-free dairy per day. There is no mention of specific products except to discourage the consumption of cream, sour cream, and cream cheese due to their low calcium content.

“Dairy is a heterogenous food group with divergent health effects and dairy products should therefore be investigated individually,” Lysne and colleagues maintained.

Their analysis was based on 1,929 patients with stable angina (80% men, mean age 62 years) from the Western Norway B Vitamin Intervention Trial.

All had undergone coronary angiography due to suspected coronary artery disease or aortic stenosis in 1999-2004. Use of preventive medications was high and included aspirin (90%), statins (90%), and beta-blockers (77%).

Participants self-reported dietary habits on a food frequency questionnaire. Average dairy intake was reportedly 169 g/1,000 kcal; the main component was generally milk (133 g/1,000 kcal).

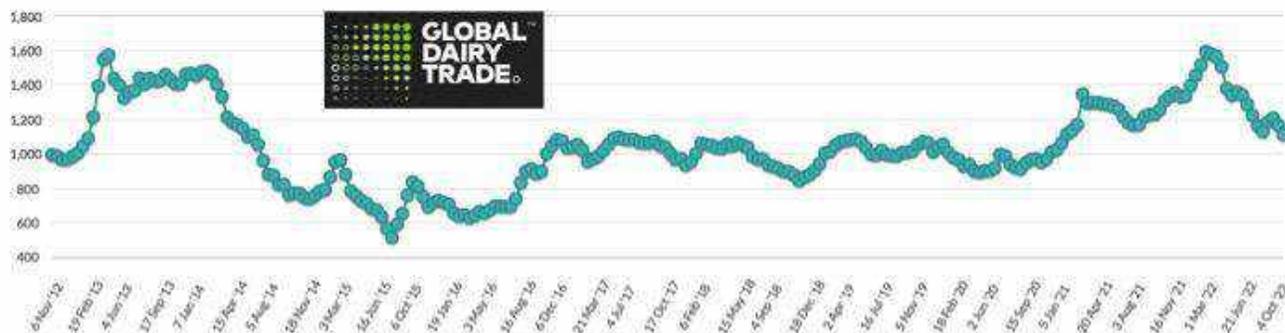
The study’s observational nature left room for bias and confounding when assessing the relationship between dairy consumption and CVD risk.

Indeed, Lysne’s group found that people who ate more dairy tended to eat less meat, vegetables, fruit and berries, fish, and potatoes. These individuals also gained more calories from protein and less from fats (except saturated fats). Other study limitations include the lack of additional dietary evaluations over years of follow-up and the potential for participants to mischaracterize their diets on a survey. Additionally, the results may have limited generalizability to the general population and people in other settings, the study authors acknowledged.

Global dairy price Index down by 4.6% in second consecutive session

OCT 19, 2022

<https://dairynews7x7.com/global-dairy-price-index-down-by-4-6-in-second-consecutive-session/>



International milk prices and volumes fell in this month's second Global Dairy Trade auction held by GDT Events on Oct 18th 2022. The GDT Price Index dropped 4.6%, with an average selling price of \$3,723 per tonne. The index lost 3.5% at the previous sale, according to GDT Events.

A total of 29,402 tonnes were sold at the latest auction, down about 4.7% from the previous one, the auction platform said on its website. The prices of key commodities are as follows-



GDT website

The auction results can affect the New Zealand dollar NZD= 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 FCG.NZ, but operates independently from the dairy giant. U.S.-listed CRA International Inc CRAI.O is the trading manager for the Global Dairy Trade auction, held twice a month, with the next one scheduled for Nov. 1.

Milk price increased by Rs20 per litre

October 18, 2022

<https://www.nation.com.pk/18-Oct-2022/milk-price-increased-by-rs20-per-litre>

KARACHI- The Karachi Dairy and Cattle Farmers Association has jacked up the milk price by Rs20 per litre in the city. With the latest increase of Rs20 per litre, the new price of 1kg milk in Karachi in the retail

market has reached to Rs200. The city administration and the provincial authorities are completely silent over the recent action. The Dairy and Cattle Farmers Association has said that they were compelled to increase the milk price due to an increase in the fares of the vehicles

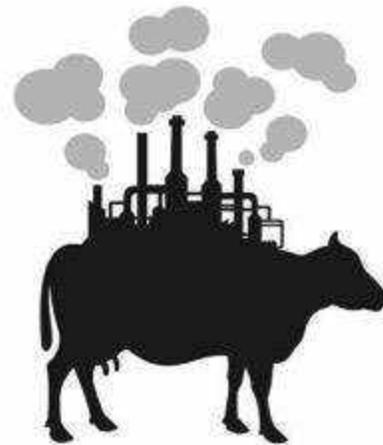
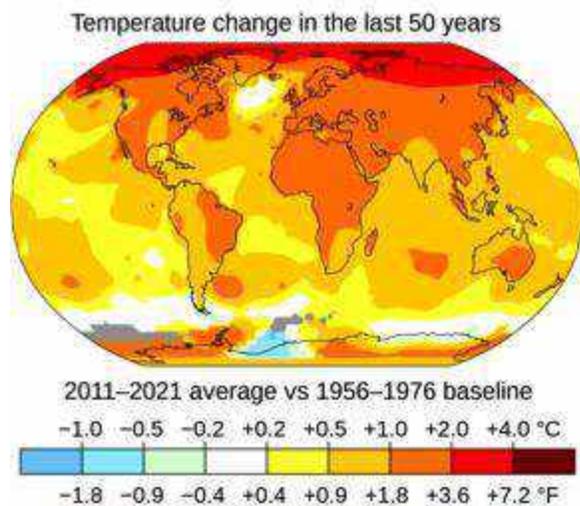
used for the transportation of milk and in the rates of dairy farm items. In the month of March, earlier this year, President Dairy and Cattle Farmers Association Shakur Umar Gujjar hinted that milk price can go upto Rs200 per litre in Karachi. Talking to reporters, he said prices of electricity, medicines, gas, livestock,

fodder and other essential items are increasing day by day and it is hard to sale the milk at the present rate. Gujjar said price of milk will touch Rs200 per litre this year and will cross this rate in 2023. The price of milk can be reduced if PM Imran Khan slaps the ban on the import of essential items, Gujjar added.

Planet Doomed:No Decrease In Record GHGs & Fuel,Cow,Cement & Steel

OCT 18, 2022

<https://dairynews7x7.com/planet-doomedno-decrease-in-record-ghgs-fuelcowcement-steel/>



The 2015 Paris Climate Change Conference committed to ideally less than a plus 1.5 degree Centigrade (+1.5C) temperature rise, and to no more than a catastrophic +2C. The 2021 Glasgow Climate Change Conference committed to “net zero emissions by 2050”. However there is no decrease in our record greenhouse gas (GHG) pollution, gas, oil, and coal use, or cattle, cement, steel and iron ore production. We are surely doomed by remorseless inaction.

There is no decrease in our presently peak global production of coal and methanogenic cattle. The atmospheric carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) are remorselessly increasing, as are oil and gas use. Greenhouse gas (GHG) producing cement,

steel, and iron ore production are all increasing. Humanity should be radically decreasing these terracidal activities but, political rhetoric aside, is damning the planet through catastrophic global inaction. The biodiversity loss is increasing catastrophically with a species extinction rate (speciescide rate) that is 100-10,000 times greater than the background extinction rate. While the rate of deforestation has decreased 3-fold since 1980, and net re-afforestation of temperate forests is now occurring, the deforestation rate in tropical forests levelled out to an appalling 50 million hectares per decade over the last 2 decades. Unless something radical happens we are doomed, the planet is doomed, and Humanity and the Biosphere face decimation.

In vain the climate scientists and biologists report the worsening realities, and plead for action with increasing desperation. Nuclear weapons and climate change are the 2 key existential threats to Humanity and the Biosphere [1-3], and one of Humanity's greatest minds, Stephen Hawking, in his last book succinctly stated our problem: "We see great peril if governments and societies do not take action NOW [my emphasis] to render nuclear weapons obsolete and to prevent further climate change" [3].

"Tackling climate change" means decreasing greenhouse gas (GHG) pollution, but the appalling reality is that tropical deforestation has remained constant and high for 2 decades, and GHG pollution is not decreasing from present peak levels in all other key areas. Yet the global political consensus of "net zero emissions by 2050" means total cessation by 2050 of GHG emissions in all key areas (with expensive atmospheric CO₂ draw-down and CO₂ sequestration to deal with unavoidable GHG pollution as in cement production).

Set out below are the carefully documented details of this appalling and terracidal failure in all key areas of greenhouse gas (GHG) pollution.

(1). Coal use is at a record level. There has been no decrease from the present peak global coal use. Global coal use in terms of energy output totalled 94.91 exajoules in 1998, then rose steadily to 158.46 exajoules in 2011, and has thence remained at roughly this level (161.1 exajoules in 2021). Global economic downturn due to the Covid-19 Pandemic evidently caused a dip in coal consumption to 151.07 exajoules in 2020 [4]. Note that 1 exajoule is 10¹⁸ joules and 1 joule (J) is the energy released when an electric current of one ampere passes through a resistance of one ohm for one second, and is also 1 coulomb-volt (C.V), 1 newton meter and 1 watt second. 1 kilowatt-hour is 3.6 megajoules, and 4.18 joules of heat energy are required to raise the temperature of 1g of water by 1°C. In chemistry 1 kilocalorie is defined as

the amount of heat needed to raise the temperature of one kilogram of water by 1°C (4.18 kJ) [5]. Burning coal, using coal as a reductant in steel production, and heating limestone in cement production all generate CO₂ [5]. Atmospheric CO₂ is responsible for about 85% of global warming due to greenhouse gases (GHGs) [1].

(2). Oil use is increasing. Daily oil use in "millions of barrels of oil per day" was 74.106 (1998), grew to 97.747 (2019), and decreased to 88.746 due to the Covid-19 Pandemic (2020), but has rebounded, increasing to 94.088 (2021) [6]. Burning coal, oil, natural gas and carbon biofuels generates the greenhouse gas CO₂ as well as toxic pollutants. About 9 million people die each year from the long-term effects of toxic pollutants from burning fossil fuels and other carbon fuels [1, 7-9].

(3). Natural gas production is increasing. Natural gas production has steadily increased in "billion cubic metres" from 2,100 (1990) to 4,200 (2021) with small downward blips in 2009 (the Global Financial Crisis) and 2020 (the Covid-19 Pandemic). Global natural gas production recovered after the Covid-19 Pandemic with a 4% increase in 2021 [10]. About 85% of natural gas is methane (CH₄). In terms of Global Warming Potential (GWP), CH₄ is 105 times greater than the same mass of CO₂ as a greenhouse gas (GHG) on a 20 year time frame and taking aerosol impacts into account [1]. Methane leaks to the extent of 3.3% in the US (based on US EPA data) and as high as 7.9% for methane from "fracking" coal seams. Assuming a GWP of 105 for CH₄, a 2.6 % leakage of CH₄ yields the same greenhouse effect as burning the remaining 97.4% CH₄. Using this information one can determine that gas burning for electricity can be much dirtier than coal burning greenhouse gas-wise (GHG-wise). While gas burning for power generates twice as much electrical energy than coal burning per tonne of CO₂ produced

(MWh/tonne CO₂), and the health-adverse pollution from gas burning is lower than for coal burning, gas leakage in the system actually means that gas burning for power can be worse GHG-wise than coal burning depending on the degree of systemic gas leakage. Gas is dirty energy, and the current coal-to-gas transition simply means long-term investment in another carbon fuel, and delaying urgently required cessation of carbon fuel burning [11-14].

(4). Atmospheric carbon dioxide (CO₂) is increasing. Global atmospheric CO₂ increased from 338 ppm (parts per million) in 1980 to 416 ppm in 2022 [15]. Atmospheric CO₂ derives from the burning of fossil fuels and other carbon fuels, and contributes about 85% of global warming. The long atmospheric half-life of CO₂ means long-term global warming even if there is cessation of CO₂ emissions now. Numerous scientists argue for a return to about 300 ppm CO₂ for a safe and sustainable planet for all peoples and all species [1].

(5). Atmospheric CO₂ equivalent (CO₂-e) is increasing. The atmospheric CO₂ equivalent (CO₂-e, CO₂-equ, CO₂-equivalent) including other greenhouse gases (excepting water, H₂O) is steadily increasing. Thus the atmospheric CO₂ equivalent (CO₂-e) of all greenhouse gases was 480 ppm in 2013, and reached 508 ppm in 2019 [16, 17]. According to the IPCC (2014): "About 450 ppm CO₂-eq, likely to limit warming to 2°C above pre-industrial levels" [18, 19] but 478 ppm CO₂-eq was already attained by 2013, and reached 508 ppm in 2019 [16, 17].

(6). Atmospheric methane (CH₄) is increasing. Global atmospheric CH₄ increased from 1.64 ppm in 1984 to 1.77 ppm in 2000, remained at 1.77 ppm until 2006 (possibly due to decreased swamp methanogenesis), and has thence increased at an ever-increasing rate to the 1.91 ppm in 2022 [20, 21]. Global warming is releasing CH₄ from CH₄-H₂O clathrates in the Arctic, and also from bacterial methanogenesis in the warming Arctic tundra. It is estimated

that 50 Gt of CH₄ will be released from the East Siberian Arctic sea bed in coming decades. Now CH₄ has a global warming potential (GWP) that is 21 times greater than that of same mass of CO₂ on a 100 year time frame but is 105 on a 20 year time frame with aerosol impacts considered. On the latter basis 50 Gt CH₄ x 105 Gt CO₂-equivalent Gt / Gt CH₄ = 5,250 Gt CO₂-equivalent or 9 times more than the terminal CO₂ emissions budget left in 2015 for avoiding a catastrophic plus 2C temperature rise [1, 19]. If that were not bad enough, CH₄ release from the Arctic involves a positive feedback loop: warming -> CH₄ release -> more warming -> more CH₄ release – a huge Arctic methane bomb threat [1, 21]. Already CH₄ is bubbling out of the Arctic Ocean in huge patches, the Siberian tundra is pitted with huge craters from CH₄ explosions, and a lighted match can set leaking tundra CH₄ ablaze.

(7). Atmospheric nitrous oxide (N₂O) is increasing. Global atmospheric N₂O increased from 0.315 ppm in 2018 to 0.336 ppm in 2022 [22]. N₂O derives from oxidation of man-made nitrogenous fertilizers that are used on a huge scale globally. The GWP for N₂O is 298 on a 100 year time frame and 289 on a 20 year time frame [1].

(8). Global crude steel production is increasing. World crude steel production rose steadily from 1,650 million metric tons (Mt) in 2012 to 1,951 Mt in 2021 [23]. Manufacture of steel involves use of coal (carbon, C) as a reductant to reduce iron oxide (roughly FeO) to iron (Fe) with CO₂ as the other product. However coal could potentially be replaced by using renewable energy-derived hydrogen (H₂) as a reductant [1].

(9). Global annual usable iron ore production is increasing. Global annual usable iron ore production increased from 1,830 Mt (2006) to 2,200 Mt (2009), then fell to 1,870 Mt (2016), and then subsequently rose steadily to 2,600 Mt in 2021 [24].

(10). Global cement production is increasing. Global cement production has steadily risen from 1.39 billion tons (1995) to 4.4 billion tons (2021), and is increasing [25]. One notes that the world population has grown from 5.7 billion (1995) to 7.9 billion (2021) i.e. the growth in global cement production has outstripped population growth by a factor of 2.3. Thus the annual per capita cement production (tons per person per year) has increased from 0.24 (1995) to 0.56 (2021).

(11). World cattle numbers are slightly increasing. The number of cattle worldwide slightly increased from 1001.72 million (2012) to 1009.69 million (2022) [26]. Cattle have digestive processes involving methanogenic anaerobic bacteria, and expel methane (CH₄) through eructation (belching). FutureFeed, a research company deriving from the Australian Commonwealth Science and Industrial Research Organisation (CSIRO) has found that beef cattle consuming a diet with less than 1% of the sea weed *Asparagopsis* show a reduction in methane production of more than 95% [27].

(12). Tropical deforestation remains huge in the 21st century. Decadal world deforestation has decreased 3-fold since the 1980s but levelled out at an appalling 50 Mha per decade in the 2000s and 2010s. There is some qualified good news in relation to deforestation. Decadal global deforestation decreased from 150 million hectares (Mha) in the 1980s to 78 Mha (1990s), 52 Mha (2000s), and to 47 Mha (overwhelmingly in the extraordinarily biodiverse tropics) in the last decade (the 2010s). Temperate forests have had a net gain since 1990 [28]. However the bad news is that deforestation appears to have levelled out at an appallingly high level of 50 Mha per decade in the last 2 decades. To put these numbers in context, the world lost 1.5 billion hectares of forest over the last 300 years (an area 1.5 times that of the US) [28]. The area of Sweden is 53 million hectares, and the area

of Thailand is 51 million hectares. Forests represent a major carbon sink but are threatened with becoming net producers of CO₂. A glimpse of what is being lost through the continued destruction of biodiverse tropical forests in Latin America, Africa and South East Asia is that the species extinction rate is now about 100-10,000 times greater than normal [29]. John Rafferty (2022): "Researchers estimate that the current rate of species loss varies between 100 and 10,000 times the background extinction rate (which is roughly one to five species per year when the entire fossil record is considered). In addition, a 2019 report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services noted that up to one million plant and animal species are facing extinction due to human activities" [29]. This catastrophic biodiversity loss in tropical forests means the potential huge loss of plant-derived bioactive chemicals as lead compounds for pharmacological development see my huge book "Biochemical Targets of Plant Bioactive Compounds. A pharmacological reference guide to sites of action and biological effects" [30].

Final comments.

Clearly, political rhetoric aside, some climate action is occurring e.g. more renewable energy and more electric vehicles. However the overall global performance remains disastrously poor: tropical deforestation has remained constant and disastrously high for 2 decades, and GHG pollution is simply not decreasing from the present peak levels in all the other key areas: atmospheric carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) are remorselessly increasing, oil and gas use are increasing, greenhouse gas (GHG)-producing cement, steel, iron ore and cattle production are all increasing, and coal use remains at an all-time high. Indeed this latest picture may conceivably worsen due to the economic impacts of the continuing global emergencies of the Covid-19 Pandemic and the Russian invasion of Ukraine.

Climate criminal Australia provides a stark example of climate change inaction by a wealthy and resource-rich country. Thus Australia is among world leading countries in 16 areas of climate criminality, and ranks worst in the World for climate policy. Australia with 0.3% of the World's population has Domestic plus Exported GHG pollution that is 5.4% of the World's total. The new Australian Labor Government replaced an outright climate change denier to effective climate change denier Coalition Government in 2022, and has promised a modest decrease in Domestic GHG pollution, but it is committed to over 100 new coal and gas projects, and to massive coal, gas, iron ore and cattle exports [31]. I repeat what I argued 25 years ago in my book "Jane Austen and the Black Hole of British History": if a resource-rich and wealthy country like Australia cannot respond properly to the climate crisis, what hope is there for the World? [32].

The global failure to act on Humanity- and Biosphere-threatening climate change will have appalling consequences. Thus it is variously estimated that in the absence of requisite action a worsening Climate Genocide about 10 billion people will die this century en route to a sustainable human population in 2100 of only about 1 billion [1, 33]. I concluded my huge book "Climate Crisis, Climate Genocide & Solutions" (2020) thus: "At the present plus 1.0-1.2 C the World is being savaged by deadly high temperatures and global warming-exacerbated droughts, floods, forest fires, high energy intensity tropical storms, sea level rise, storm surges, massive ecosystem loss and irreversible Biodiversity loss. A plus 1.5C is inevitable in the coming decade and in the face of remorselessly increasing CO₂ and CH₄ in the atmosphere one concludes that a catastrophic plus 2C is effectively unavoidable. Nevertheless we are inescapably obliged to do everything we can to make the future "less bad" for our children, our grandchildren and future generations" [1].

Our children and future generations will have to pay for Humanity's appalling failure to act on man-made climate change that is set out above, and in recent years in even more comprehensive analyses [1, 34]. That failure is summarized above as a failure to decrease annual GHG emissions in 11 key areas. However the fundamental failure lies in refusal to recognize and apply a proper Carbon Price to GHG pollution. It has been expertly estimated from different approaches that the damage-related cost of GHG pollution is \$200 per tonne of CO₂-equivalent [1]. However the International Monetary Fund (IMF) has reported that the world average applied Carbon Price is a mere \$2 per tonne of CO₂-equivalent [35, 36]. I explained this to my grandchildren at a restaurant lunch: the restaurant owner gives us a bill for \$200 but we say that we will only pay him \$2.

Children get it. Children know that they will have to pay hugely for the mess we have bequeathed them [37]. Greta Thunberg has responded to the failure of adults to tackle climate change with an indignant "How dare you!", and has responded to the dishonest climate rhetoric of climate criminal politicians thus: "Blah, blah, blah!" Carbon Debt is simply the damage-related cost of greenhouse gas (GHG) pollution that if not addressed now will inescapably have to be paid by future generations. However GHG emissions continue to rise inexorably and there is no global program to draw down CO₂ and other GHGs from the atmosphere. While young people are now vociferously demanding massive climate action, the inescapable global Carbon Debt is \$200- \$250 trillion and increasing by \$16 trillion each year. Unlike Conventional Debt that can be variously expunged by bankruptcy, printing money or default, Carbon Debt is inescapable – thus, for example, if sea walls are not built at gigantic expense, then cities, towns and arable land will be inundated [38, 39].

Climate criminal Australia has a Carbon Debt (in US dollars) of \$5 trillion that is increasing at \$400 billion per year and at \$40,000 per head per year for under-30 year old Australians [39]. If you know the annual per capita GHG pollution for your country [40] you can readily estimate the annual increase in Carbon Debt for your country too. When young people appreciate these numbers there will be a children-led Climate Revolution (non-violent of course) [40]. Disproportionately GHG polluting countries are not just stealing from the young, they are also egregiously lying by their disingenuous rhetoric: increasing GHG pollution does not constitute “climate change action”. The planet is doomed unless massive climate change action is urgently undertaken. Disproportionately climate criminal corporations and countries must be urgently subject to rigorous penalties and global Boycotts, Divestment and Sanctions (BDS). The cost of greenhouse gas pollution must be fully borne by the polluters. Please inform everyone you can.

References.

- [1]. Gideon Polya, “Climate Crisis, Climate Genocide & Solutions”, Korsgaard Publishing, 2020.
- [2]. “Nuclear weapons ban, end poverty & reverse climate change”, 300.org: <https://sites.google.com/site/300orgsite/nuclear-weapons-ban> .
- [3]. Stephen Hawking, “Brief Answers to the Big Questions”, John Murray, 2018.
- [4]. Statista, “Coal consumption worldwide from 1998 to 2021”: <https://www.statista.com/statistics/265507/global-coal-consumption-in-oil-equivalent/> .
- [5]. “Joule”, Wikipedia: <https://en.wikipedia.org/wiki/Joule> .
- [6]. Statista, “Oil consumption worldwide from 1998 to 2021”: <https://www.statista.com/statistics/265239/global-oil-consumption-in-barrels-per-day/> .
- [7]. “Stop air pollution deaths”: <https://sites.google.com/site/300orgsite/stop-air-pollution-deaths> .
- [8]. Aaron J Cohen, Michael Brauer et al., “Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015”, The Lancet, April 2017: [http://thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)30505-6/fulltext](http://thelancet.com/journals/lancet/article/PIIS0140-6736(17)30505-6/fulltext) .
- [9]. Jason Arunn Murugesu, “Pollution killed 9 million people worldwide in 2019 alone”, New Scientist, 17 May 2022: <https://www.newscientist.com/article/2320777-pollution-killed-9-million-people-worldwide-in-2019-alone/> .
- [10]. World energy & climate statistics, “Natural gas production”, 2021: <https://yearbook.enerdata.net/natural-gas/world-natural-gas-production-statistics.html> .
- [11]. “Gas is not clean energy”: <https://sites.google.com/site/gasisnotcleanenergy/> .
- [12]. “Gas is dirty energy”: <https://sites.google.com/site/gasisnotcleanenergy/gas-is-dirty-energy> .
- [13]. Gideon Polya, “The lie that gas is “cleaner””, Green Left, 7 October 2020: <https://www.greenleft.org.au/content/lie-gas-cleaner> .
- [14]. Gideon Polya, “Methane Leakage Makes Australia A World Leading Per Capita Greenhouse Gas Polluter”, Countercurrents, 18 February 2022: <https://countercurrents.org/2020/02/methane-leakage-makes-australia-a-world-leading-per-capita-greenhouse-gas-polluter/> .
- [15]. US NOAA, “Trends in atmospheric carbon dioxide”: <https://gml.noaa.gov/ccgg/trends/global.html> .
- [16]. Bureau of Meteorology and CSIRO, “State of the Climate

2014": http://www.bom.gov.au/state-of-the-climate/documents/state-of-the-climate-2014_low-res.pdf .

[17]. Bureau of Meteorology and CSIRO, "State of the Climate 2020": <file:///D:/Users/Gideon/Downloads/State-of-the-Climates-2020.pdf> .

[18]. Gideon Polya, "International Consensus-Based IPCC Summary For Policymakers (2014) Downplays Acute Seriousness Of Climate Crisis", *Countercurrents*, 12 November, 2014: <https://www.countercurrents.org/polya121114.htm> .

[19]. The IPCC, "Climate Change 2014 Synthesis Report, Approved Summary for Policy Makers", 1 November 2014: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_SPM.pdf .

[20]. US NOAA, "Trends in atmospheric methane": https://gml.noaa.gov/ccgg/trends_ch4/ .

[21]. "Methane Bomb Threat": <https://sites.google.com/site/methanebombthreat/> .

[22]. US NOAA, "Trends in atmospheric nitrous oxide": https://gml.noaa.gov/ccgg/trends_n2o/ .

[23]. Statista, "World crude steel production from 2012 to 2021": <https://www.statista.com/statistics/267264/world-crude-steel-production/> .

[24]. Statista, "Production volume of usable iron ore worldwide from 2006 to 2021": <https://www.statista.com/statistics/589945/iron-ore-production-gross-weight-worldwide/> .

[25]. Statista, "Cement production worldwide from 1995 to 2021": <https://www-statista.com/statistics/1087115/global-cement-production-volume/> .

[26]. Statista, "Number of cattle worldwide from 2012 to 2022 (in million head)", 2022: <https://www-statista.com/statistics/263979/global-cattle-population-since-1990/> .

[27]. Australian Department of Climate Change , Energy, the Environment and Water, " From beaches to burps: native Australian seaweed key to reducing methane emissions from cows", 2021: <https://www.dcceew.gov.au/climate-change/publications/from-beaches-to-burps-native-australian-seaweed-key-to-reducing-methane-emissions-from-cows> .

[28]. Hannah Ritchie and Max Roser, "Deforestation and forest loss", *Our World in Data*, 2020: <https://ourworldindata.org/deforestation> .

[29]. John P. Rafferty, "Biodiversity loss", 21 September *Britannica*, 2022: <https://www.britannica.com/science/biodiversity-loss> .

[30]. Gideon Polya, "Biochemical Targets of Plant Bioactive Compounds. A pharmacological reference guide to sites of action and biological effects", Taylor & Francis & CRC Press, 2003.

[31]. Gideon Polya, "Cowardly new Australian Labor Government fails on nuclear weapons, poverty & climate change", *Countercurrents*, 6 July 2022: <https://countercurrents.org/2022/07/cowardly-new-australian-labor-government-fails-on-nuclear-weapons-poverty-climate-change/> .

[32]. Gideon Polya, "Jane Austen and the Black Hole of British History. Colonial rapacity, holocaust denial and the crisis in biological sustainability", G.M. Polya, 1998, 2008 (2022 edition being finalized).

[33]. "Climate Genocide": <https://sites.google.com/site/climategenocide/> .

[34]. Gideon Polya, "Extrapolating 11,000 scientists Climate Emergency warning to 2030 catastrophe", *Countercurrents*, 14 November 2019: <https://countercurrents.org/2019/11/extrapolating-11000-scientists-climate-emergency-warning-to-2030-catastrophe> .

[35]. Gideon Polya, "Australia Rejects IMF Carbon Tax & Preventing 4 Million Pollution Deaths By 2030", *Countercurrents*, 15 October

2019: <https://countercurrents.org/2019/10/australia-rejects-imf-carbon-tax-preventing-4-million-pollution-deaths-by-2030/> .

[36]. International Monetary Fund (IMF), “Fiscal Monitor: how to mitigate climate change”. Executive Summary”, September 2019: <file:///C:/Users/Gideon/AppData/Local/Temp/execsum-6.pdf> .

[37]. Gideon Polya, “50 Reasons For Free University Education As We Bequeath The Young A Dying Planet”, Countercurrents, 19 March 2017: <https://countercurrents.org/2017/03/50-reasons-for-free-university-education-as-we-bequeath-the-young-a-dying-planet/> .

[38]. Gideon Polya, “Inescapable \$200-250 trillion global Carbon Debt increasing by \$16 trillion annually”, Countercurrents, 27 March 2019: <https://countercurrents.org/2019/04/inescapable-200-250-trillion-global-carbon-debt-increasing-by-16-trillion-annually-gideon-polya/> .

[39]. “Carbon Debt Carbon Credit”: <https://sites.google.com/site/carbondebtcarboncredit/> .

[40]. “Climate Revolution Now”: <https://sites.google.com/site/300orgsite/climate-revolution> .

[41]. Gideon Polya, “Revised Annual Per Capita Greenhouse Gas Pollution For All Countries – What Is Your Country Doing?”, Countercurrents, 6 January 2016: <https://countercurrents.org/polya060116.htm> .

Dr Gideon Polya taught science students at La Trobe University, Melbourne, Australia over 4 decades. He published some 130 works in a 5 decade scientific career, notably a huge pharmacological reference text “Biochemical Targets of Plant Bioactive Compounds”. He has also published “Body Count. Global avoidable mortality since 1950” (2007, 2022) and “Jane Austen and the Black Hole of British History” (1998, 2008). He has recently published “US-imposed Post-9-11 Muslim Holocaust & Muslim Genocide” (2020), and “Climate Crisis, Climate Genocide & Solutions” (2020). For images of Gideon Polya’s huge paintings for the Planet, Peace, Mother and Child see: <http://sites.google.com/site/artforpeaceplanetmotherchild/> .

Teens are dumping milk on store floors to protest the ‘destructive’ dairy industry

OCT 18, 2022

<https://dairynews7x7.com/teens-are-dumping-milk-on-store-floors-to-protest-the-destructive-dairy-industry/>



The latest environmentalist trend is here: pouring out milk in grocery stores.

All across the United Kingdom, teenagers concerned about the environment are doing “milk pours.” The new trend involves going into

grocery stores, picking up cartons of cow-produced milk, and pouring out their contents, according to the animal rights group Animal Rebellion.

Videos that have popped up on social media show teens pouring milk onto the floor, over sales counters, and elsewhere in the store.

“The dairy industry is incredibly environmentally destructive. The world’s top 5 meat and dairy corporations are now responsible for more GHG emissions than Exxon, Shell or BP,” the organization said in a tweet Saturday.

“We NEED a plant-based future now,” it added.

The account also shared a report from Grain, an international non-profit organization, and the Institute for Agriculture and Trade Policy (IATP), which calls for the planet to “dramatically reduce its greenhouse gas emissions” by eliminating meat and dairy consumption.



The enraged teens are demanding a more plant-based future.

According to Animal Rebellion, the “milk pours” took place at eight different locations Saturday, including London, Manchester, Norwich and Edinburgh.

“Animal farming is THE leading cause of the loss of our wildlife and natural ecosystems,” the group said in another tweet, which also called for the government to “support farmers in an urgent transition to a plant based food system and allow the freed up land to be rewilded in order to restore wildlife populations.”

Several countries around the world have imposed regulations on the agriculture industry, such as limits on nitrogen emissions caused by dairy production. Environmentalists have encouraged the use of dairy alternatives, such as almond, soy, coconut and oat milk, though these too have been criticized.

The Biden administration has indicated that it intends to push changes on the US farming industry to tackle climate change.

In 2020, the EPA estimated that 11% of the U.S.’s total greenhouse gas emissions came from the agriculture sector, compared to 27% from transportation, 25% from energy, and 24% from industry.

PFA disposes of 12,600 litres of tainted milk

October 17, 2022

<https://www.brecorder.com/news/40203465/pfa-disposes-of-12600-litres-of-tainted-milk>



LAHORE: The Punjab Food Authority (PFA) continued its operation against adulterated milk in the metropolis on the eve of World Food Day (WFD) and disposed

of 12,600 liters of chemically contaminated milk.

PFA Director General Mudassar Riaz Malik said that the dairy safety teams (DSTs) placed screening pickets at the entry points of the city and examined several milk carrier vehicles loaded with thousands of liters of milk. He said that the enforcement teams of PFA had taken milk samples for screening tests on the spot and taken action against milk carrier vehicles after finding contamination of polluted water and chemicals in 315 mounds of milk.

He added that adulterated ingredients were used for increasing the thickness and quantity

of the milk. However, the use of chemically contaminated milk or food poses a threat to users' health, especially children.

According to the PFA Act, adulteration of water, powder and chemicals in milk is an offence, he said. The director general said that the wicked practice of milk adulteration has reduced due to

continuous checking of milk carrier vehicles and milk shops from the PFA teams. He further said that PFA will start a door-to-door milk testing campaign in Lahore very soon which purpose would be to curb the supply of contaminated milk.

AAF-Heifer Netherland cut GHG emissions-climate-smart dairying in Nepal

OCT 17, 2022

<https://dairynews7x7.com/aaf-heifer-netherlands-to-cut-ghg-emissions-using-climate-smart-dairy-farming-in-nepal/>



A GCO Agriculture Foundation (AAF), an AGCO Corporation foundation with the vision to prevent and relieve hunger through sustainable agricultural development, Thursday announced a USD 250,000 grant to Heifer Netherlands (Stichting Heifer Nederland) to improve the sustainability, productivity and resilience of smallholder dairy farming families through the development of a productive and climate-smart dairy farming model in Nepal.

The two-year partnership was chosen from hundreds of grant applications received in response to AAF's climate campaign. The project is an integral part of the AAF's strategic sustainability actions to support climate action within the context of agriculture.

Dairy farming is an important source of livelihood for rural people in Nepal, generating income, food and nutrition security and employment, particularly for vulnerable households. However, dairy livestock generates high amounts of greenhouse gas (GHG) emissions and contributes to climate changes, including

erratic rainfall patterns and flooding that impact dairy farmers in the Himalayan country. Funded by the AAF, this project will help minimise existing GHG emissions from Nepalese smallholder dairy farming practices while improving productivity. It will also help smallholder dairy producers, particularly women, focus on climate-smart solutions. The project approach will combine several sustainable farming methods. Producers will learn to develop climate-smart feed management and animal husbandry systems that reduce enteric fermentation, improve the productivity of animals and sequester carbon emissions through fodder trees and proper manure management with clean energy production using biogas and organic fertilisers.

Highlighting the objectives of the initiatives, Roger Batkin, Board Chair, AGCO Agriculture Foundation said, "Nepal remains one of the world's least-developed nations. The majority of people live in rural areas. We want to prioritise actions for the direct benefit of these farmers' livelihoods while supporting sustainable agricultural practices that maintain soil fertility, raise healthy livestock, and improve the environment. Across food chains, from livestock to crop production, climate change continues to have a significant impact on food security and livelihoods of farmers and their communities."

“Over the next 24 months, the project will support beneficiary farmers (100 households/500 family members), dairy value chain actors, and dairy farmers across Nepal during the dissemination phase, rural communities, academia, research institutions and government and non-governmental institutions. In addition, the project will contribute directly to Sustainable Development Goals (SDGs) 1, 2, 7 and 13 and indirectly to SDGs 8, 10, 12 and 17,” AAF said. Briefing on the project, Goossen Hoenders, Executive Director of Stichting, Heifer Nederland,

“We are very happy with the trust and financial support that the AGCO Agricultural Foundation is providing to Heifer Netherlands to implement the climate-smart dairy farming project in Nepal. This project will also contribute to the work of a large long-term programme called ‘Milky Way Nepal’ that aims to transform the small-holder dairy sector into a fair, profitable and climate-smart value chain by 2030. The granted award is one of the first steps into realising this ambitious programme.”

New trend has teens dumping out milk in grocery stores

October 16, 2022

<https://www.q13fox.com/news/teens-dumping-milk-grocery-stores>



The latest environmentalist trend is here: pouring out milk in grocery stores. All across the United Kingdom, teenagers concerned about the environment are doing "milk pours." The new trend involves going into grocery stores, picking up cartons of cow-produced milk, and pouring out their contents, according to the animal rights group Animal Rebellion.

Videos that have popped up on social media show teens pouring milk onto the floor, over sales counters, and elsewhere in the store. "The dairy industry is incredibly environmentally destructive. The world's top 5 meat and dairy corporations are now responsible for more GHG emissions than Exxon, Shell or BP," the organization said in a tweet Saturday. The account also shared a report from Grain, an international non-profit organization, and the Institute for Agriculture and Trade Policy (IATP), which calls for the planet to "dramatically reduce its greenhouse gas emissions" by eliminating meat and dairy consumption. According to Animal Rebellion, the "milk pours" took place at eight different locations Saturday, including London, Manchester, Norwich, and Edinburgh.

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