

Cows and their milk

May 2021 brought to the limelight a debate that has been simmering in classrooms and social media for some time. The organisation, People for the Ethical Treatment of Animals (PETA), sent a letter to Anand Milk Union Limited (Amul) advocating a switch to vegan milk. Amul, on its part, issued a public interest advertisement stating that plant-based beverages are costly and do not have the same health benefits as cow's milk.

If Amul's claim that plant-based milk is "mostly fortified with artificial vitamins, synthetic colours & flavours" is true, then it is a matter of some concern. However, we do need to take a step back and focus on the larger issue at hand.

A friend proposed to spend a Sunday at a temple to bathe and revere the cow, followed by receiving the holy animal's blessing by consuming the milk. Another friend took complete offence to the very idea of doing something like this. The milk of the cow, as should be the case for all other animal species, belonged only to its young.

The discussion that followed is an apt summary of the vegan debate in the Indian context. Both sides are speaking in favour of the cow, one from a religious perspective and the other from an ethical perspective. In the Hindu religion, the cow is a sacred animal akin to a mother.

The vegan argument holds ground because the dairy "industry" in the West, where this concept originates, has treated cows inhumanely since the dawn of the industrial revolution. There is much evidence to highlight the extremely poor conditions in which cows are kept for milking in developed nations. The cow is seen as a milk-producing machine rather than a living, breathing organism.

Cows in India are considered holy for many reasons. However, the importance of cows in rural India goes beyond religion. The health of a



cow in an Indian agricultural household is linked with economic prosperity. Cow urine has been traditionally used as a disinfectant, anti-septic and purifier. The cow provides milk and manure, all essential for maintaining sustainable livelihoods in rural India.

Amul claims a long history of farmers in India keeping their cows with love and respect, often giving them names, and treating them as members of the family. This is certainly guided by the religious and cultural association of the cow as a sacred mother figure. For this reason, consuming cow milk is culturally more accepted as compared to consuming milk of any other animal.

Cow milk is known to be a good source of nourishment. It is rich in

protein, calcium, magnesium, vitamin B12 and iodine. This makes it a good source of nutrients for those who can afford it. Others must settle for receiving these benefits from animals other than cows like Gandhi's poor man's cow, the goat.

In 1912, Gandhi took a vow to not consume milk ever again. It is believed that this vow was taken after Gandhi came to know about the cruel act of "phooka" - a process of introducing air or a substance into the female organ of a milch animal for inducing secretion of milk. However, in later years, Gandhi's health deteriorated, and he began consuming goat's milk. In his autobiography, Gandhi justifies this decision stating that "the will to live proved stronger than the devotion to truth." In recent times, the

practice of "phooka" is prohibited in India along with any similar practice such as giving hormonal injections to induce the secretion of milk.

Cow milk is an integral part of the Indian diet and its consumption is a symbol of keeping good health. It is only in recent times that research to the contrary, or at least exploring how necessary it is to drink cow milk for good health, is being undertaken. Promoting the cow as sacred has certainly helped to sustain the ethical treatment of cows in India.

Ancient wisdom, however, is being superseded by western learning. The relationship of the farmer with the cow is being altered. This is threatening the special place of the Indian cow. Cows of Western origin produce A1 beta-casein milk

while cows of Indian origin produce A2 beta-casein milk. A1 milk is considered unhealthy and addictive by some researchers while A2 milk is believed to be healthier and safer.

Consuming cow milk is part of Indian culture. Amul need not worry. PETA, on the other hand, is right about the rising global interest in vegan products because of increasing awareness of the dairy industry's inhumane practices. Amul and other interested parties should work with farmers and dairy research institutes to revive the traditional methods of nurturing cows.

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100 YEARS AGO

OCCASIONAL NOTE

Speaking on "The Progress of the Motor Ship" at the Shipbuilding and Engineering Exhibition recently held at Olympia, Mr. James Richardson, of Messrs. Wm. Beardmore and Sons, Ltd., committed himself to the prediction that the motor ship would be the cargo ship of the future, and there appears every reason to believe that in time the internal combustion engine will replace the steam engine as the power-raiser for ocean traffic, just as the steam engine replaced sails. In 1914 motor ships represented less than one half of one per cent of the world's tonnage, or to be exact 4.7 per cent. On June 30 last the proportion had risen to two per cent, and the returns of Lloyd's Register showed that only in regard to this class of vessel did building returns show no important reduction. More than 10 per cent of the total tonnage building today is to be equipped with internal combustion engines, the equivalent of 15 per cent of the number of vessels under construction. No doubt as motor tonnage increases oil-burning tonnage will decrease, for burning oil under boilers is as wasteful a method of utilising liquid fuel as any. It was comparatively economical when the price of coal was at its zenith, but with coal prices substantially reduced the financial advantage which oil conferred was lost. In addition the difficulty which ship-owners found in obtaining supplies entailed losses.

NEWS ITEMS

ALLEGED DESTRUCTION OF RAILWAY

When the Tribunal resumed its sitting today the adjourned case in which 27 accused, were charged with destruction of railway line at Vadakampad Bridge, was resumed. Several of the accused cited defence witnesses who were expected to establish their good character, faction in their village and enmity in consequence. One of the accused called Adhighari, a village magistrate, of Tiruvangadi, to establish his character. One of the defence witnesses could not be served as he had fled from his home owing to the disturbed state of the country. The Public Prosecutor pointed out that accused No. 27 was the leader of the gang, who came from Parapanangade side, and gave out false information that the district magistrate and the district superintendent of police were killed. The Tribunal reserved judgment till tomorrow.

MAXIM GORKY ON RUSSIA'S FUTURE

Maxim Gorky, interviewed by a representative of the Daily News, declared that Communism would pass away in Russia giving birth to a sort of Socialist republic or even a democratic republic similar to that of the United States, but the vast experiment now being made in Russia would have enormous influence upon the position of the proletariat. There was no chance whatever of a return to a Tsarist regime. The people largely supported Communism because no alternative was at present possible. If the Soviet fell complete chaos would ensue. The opposition of the peasants was too great for the success of Communism. They were brutal, debased, hardly human. There was complete cleavage between country and towns. Only the intellectuals could save Russia.

UNEMPLOYMENT CONFERENCE

The half dozen business experts who accompanied Sir Hilton Young, the Financial Secretary to the Treasury, from Euston tonight to Gairloch for a conference with the Premier on unemployment, include some surprise names. Those selected are Sir James Hope Simpson, Director of the London and North-Western Railway, Sir Allan Smith, Chairman of the Managing Committee, Engineering Employers Federation, Mr. W.T. Layton, Director of the National Federation of Iron and Steel Traders, Mr. Dudley Ward, who is only thirty-five and who is Manager of the Intelligence Branch of the British Overseas Bank, and Mr. Pembroke Wicks, Secretary of the Cabinet Committee on Unemployment.

SECRET ORGANISATIONS

In the Reichstag the Chancellor severely trounced the German Nationalist Party by declaring that their manoeuvres were not conducive to the country's welfare in the present crisis. Their aloofness was detrimental to Germany's foreign policy. Reactionary plotting were even more serious than had been feared. A secret organisation had been discovered stretching from Baden to Upper Silesia, and they aimed at the overthrow of the constitution. This organisation, the headquarters of which are apparently known, had recently endeavoured to accomplish another Kapp insurrection. The Chancellor declined to give further details as the problem was under investigation. He appealed to Germans to protect the Republic from downfall.

Crisis hits decarbonisation efforts

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As the world prepares to discuss more aggressive cuts to carbon emissions at the UN's COP26 climate conference in Glasgow, China has just sent out the worst possible advance signal. It is going to loosen restrictions on coal mining in the final three months of the year in response to an energy crisis which has seen nationwide blackouts and many manufacturers shutting down production lines in recent weeks.

China will now extract more coal in 2021 than the 3.9 billion tonnes it extracted in 2020, as well as quietly importing more from places like Australia. The move flies in the face of President Xi Jinping's strong rhetoric about decarbonisation, including a very recent commitment to stop building coal-fired power stations in other countries. And it raises questions about the nation's ability to make good on the tough carbon reduction targets in its 14th five-year plan to 2025.

So how did China get into this situation, and what does it mean for the world's efforts to reach net zero?

China has a so-called dual control target for national environmental protection, which is about cutting both energy consumption and the amount of energy that goes into each unit of GDP (known as energy intensity). Having made impressive strides forward in the 2015-20 period, China is now aiming to cut energy intensity by 13.5 per cent by 2025 and to cut carbon emissions per unit of GDP by 18 per cent, with a view to bringing overall carbon emissions down by 2030.

To this end, China has been cracking down on coal, which still generates around two-thirds of its electricity. The state has been shutting down small and inefficient mines and putting restrictions on coal production. Consequently, coal output has been



falling in many months in 2021, while coal imports were also low.

But this drove up the price of coal, and electricity-generating companies could not pass on the costs to consumers because of national price caps. Faced with generating electricity at a loss, major players have simply stopped producing.

To make matters worse, China has had an exceptionally hot summer (which itself is being blamed on climate change). The dry windless weather has meant that China's wind and hydroelectric power have been generating less electricity than usual. The result has been outages that have seen many families reduced to candle-lit dinners, traffic lights failing, and unlucky people getting trapped in elevators between two floors.

Meanwhile, provinces have been

given specific targets and deadlines to help achieve the emissions targets, many of them related to electricity consumption. Beijing "names and shames" laggard provinces with yellow (bad) and red (very bad) alerts.

As with other hard targets in China, missing them can have serious implications for a local official's career prospects. So, in response to these alerts, several provinces have been imposing electricity usage restrictions, particularly on companies in energy-intensive industries like steel, printing, textiles, wood, chemicals, plastics and goods manufacturing. In many cases, companies were indiscriminately told to restrict production to two or three days a week - compounding the problems from generating companies shutting down power.

Coming at a time when demand for Chinese-made products has been rising sharply because global consumer spending is recovering from the pandemic, this is one more hit to global supply chains. They are already having to deal with too few semiconductors, workers, containers and ships - to name only a few. Apple, Tesla, Microsoft and Dell are among the big names saying their supply chains are now also being hit by China's energy crisis.

Not only is China loosening restrictions on coal production for the rest of 2021, it is making special bank loans available for mining companies and even allowing safety rules in mines to be relaxed. This is having the desired effect: on October 8, after a week in which the markets have been closed for a national holiday, domestic coal prices promptly dropped by 5 per cent. This will presumably ease the crisis as the winter approaches, notwithstanding the government's embarrassment going into COP26. So what lessons can be learned for the road ahead?

Since the disruptions to global supply chains caused by Covid abated, the mood has been one of getting back to normal. But China's power struggle illustrates how fragile they can still be. The three provinces of Guangdong, Jiangsu and Zhejiang are responsible for nearly 60 per cent of China's US\$2.5 trillion exports. They are the nation's biggest electricity consumers and are being hardest hit by the outages.

In other words, so long as China's economy (and by extension the global economy) is so dependent on coal-fired power, there's a direct conflict between cutting carbon and keeping supply chains functioning. The net zero agenda makes it very likely we will see similar disruptions in future. The businesses that survive will be the ones that are prepared for this reality.

In China, the fixed electricity price cap prevented prices from rising

even when it meant producing electricity at a loss. The power shortages have seen some big manufacturers surviving by hiring private generators (meaning more carbon emissions), while smaller players who can't afford generators have been unable to fulfil orders and are going bust. With large manufacturers looking to recoup the cost of hiring generators, and fewer goods being exported overall, global consumer prices will go up.

Contrast this with a market economy like the UK, which is having its own energy crisis because of high gas prices. It too has consumer price caps for electricity, but it has been quicker to allow them to rise. This won't save many smaller energy providers, who have too many customers on unprofitable fixed-tariff contracts and don't own any of the energy network, so can't offset their losses by wholesaling energy to other providers at more expensive prices. Businesses and consumers are going to suffer too from higher energy bills, but there are no power cuts so overall the disruption to the economy is much less.

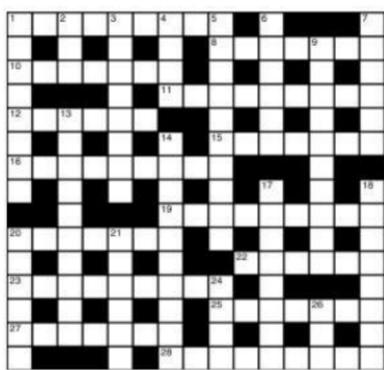
Despite its temporary climb-down over coal-mining, China's resolve over decarbonisation is worth commending. As pointed out by analysts at Nomura bank: "Beijing's unprecedented resolve... could result in invaluable long-term gains, but the short-term costs to both the real economy and financial markets are substantial."

In short, the world is facing a real crisis. The consequences from climate change are appearing more frequently than before. Yet for all the exciting low-carbon technologies, we are still some way from being able to rely on them to cut carbon emissions without undermining the economy. The good news is that at least many countries including China are now committed to cutting emissions and are willing to collaborate to achieve this. Whatever the difficulties ahead, collaboration is surely the key to net zero.

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CROSSWORD

NO 29062



YESTERDAY'S SOLUTION



ACROSS

- Accessory in shock admission, initially: Queen, possibly, has stolen large diamond (5,4)
- In the morning, Rita drinks in pub, getting jug (7)
- Present promotional film Oscar forwarded (7)
- Harry pleased it removes hair (9)
- Grass seen next to light brown climbing palm (6)
- Study Russian course, then wait (7)
- I'm an adult in a state, in a state (5,4)
- "SEAT Ibiza extremely racy," she snarled (4,5)
- Payment to clergyman before surrender? (7)
- Bishop regarding discharge from

- the back as wonderful (6)
- Supply stopping nearly at once, which is outstanding (9)
- Forget naughty nun is entertaining king (7)
- Is unable to even stand for food? (7)
- Celebrity's torment that's explosive (4,5)

DOWN

- Breathe like this: "Harrrr" (8)
- I would love to create artificial language (3)
- Musical and ballet, oddly, can be avoided (8)
- Elderly paid with files (4)
- Mother means to hold firm, providing protection for the home (4,6)

- Means to exchange trousers quietly with son (6)
- Assign structure to English for displaced Zoroastrian (6)
- Prosecute a criminal in a place far away (5,5)
- In poor condition, part of rectum bled - Ow! Nastyl! (10)
- Naked babes ruined part of breakfast? (5,5)
- Society collapses after millions lost moral doubts (8)
- Court until Ibra is undone (8)
- Religious office lifting financial restriction is limited by income (6)
- Waste pipe nearly crushes medicine dispenser (6)
- Container with a musical instrument (4)
- Brilliant people run away (3)

NOTE: Figures in parentheses denote the number of letters in the words required. (By arrangement with The Independent, London)

