

The Purest Food: Cowmilk, Transcendent Claims, and Ecological Sustainability in India

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Abstract

Milk from indigenous cows has emerged as a fast-rising food movement among urban Indian elites who praise the milk as better for nutrition, animal welfare, and ecological sustainability.¹ Claims about this milk also appeal to the Hindu idea of the sacred cow and to nationalist discourses about the purity and authenticity of indigenous products. This chapter examines practices around indigenous cowmilk to analyze how religion and ethics inform the creation of a more ecologically benign milk economy. It shows how beliefs about the sacred cow, compassion for living beings, and care of the earth confront capitalism and its instrumentalization of nature for profit. The consequent compromises illuminate the limits of this and other elite movements for alternatives to industrial agriculture.

Keywords: Industrial agriculture, milk, sacred cow, indigeneity, Hinduism, capitalism

Introduction

Milk from indigenous breeds of cows has emerged as a fast-rising food movement among elite urban consumers in India. Producers and consumers praise the milk as better for nutrition and food safety, animal welfare, and ecological sustainability. Claims about the superiority of this milk also appeal to the Hindu idea of the sacred cow and to a nationalist discourse about the purity and authenticity of indigenous products. This chapter examines the material and discursive practices around *desi* (indigenous) cowmilk to understand how religion and ethics inform attempts to create a more ecologically benign milk economy. It shows that actors' transcendental beliefs about the sacred cow, compassion for living beings, and care of the earth confront the pervasive power of capitalism and its instrumentalization of nature for profit. The compromises they make illuminate the limits of this and other elite movements for alternatives to industrial agriculture (Frazier 2018). They also provoke us to probe beyond the "solutions" that lie within easy reach to the more difficult task of embedding ecological ethics into the everyday life of capitalism (Guthman 2014).

I begin by explaining the cultural significance of cows for Hindus, especially upper castes, for whom the cow is sacred and cowmilk products have the power to purify. This deification contrasts with the profane status of another common indigenous milch animal: the buffalo. In tracing the divergent careers of cows and buffaloes—and their milk—in the dairy economy, I discuss how the rise of Hindu nationalism since the 1990s and the consequent government ban on cow slaughter has disrupted the economic viability of small-scale cow rearing as part of an inter-caste, inter-religious rural economy. After discussing the changing cultural politics of the sacred cow, I turn to the political economy of Operation Flood, the government program since the 1970s to increase milk supply to urban consumers by using crossbred cows, intensive feeding, and industrial processing in a national production grid. I show how this program led to cowmilk production outstripping buffalo milk so that, in 2014, cowmilk emerged as a new and distinct form of mass-marketed, packaged milk.

Cultural politics and political economy provide the context for the subject of this chapter: the newly developed market for milk from *indigenous* breeds of cow. We interviewed dairy owners, workers, and consumers in and around Delhi to understand the ethical choices they make in an environment where one's relationship with food has become fraught.² We found that *desi* dairy owners persuasively promote a syncretic philosophy that weaves together religious, ecological, and biomedical claims but, to run a profitable business, they ultimately conform to the agro-industrial logic that they criticize and aim to counter. Our conversations with consumers showed that a surfeit of conflicting information had left people confused about food and health, and long-distance industrial food chains had made them suspicious about the quality of what they ate and drank. Those who wanted to do the right thing, and could afford to do so, turned to that superfood: organic *desi* cowmilk.

I conclude by asking whether the turn toward organic, indigenous cowmilk could usher in a wider transformation by nudging industrial dairying toward greater ecological sustainability and an ethics of care for other living beings. I argue that, while they used organic inputs, *desi* cow dairies remained milk monocultures unintegrated into local ecological loops. In addition, their high-end boutique business model could not be adopted by the vast majority of farmers who supplied the national milk grid. Finally, rearing animals exclusively for their milk meant that they had to be killed when they stopped lactating. It is only by concealing the violence inherent in dairying as a capitalist enterprise that the idea of the sacred cow can continue to be cultivated. This contradiction highlights that elite consumer action is not by itself a coherent strategy for remaking ecological relations. Yet the questions that it raises about health and welfare—human, animal, and planetary—reflect the concerns of a wider constituency. To become a truly transformative movement, it will have to transcend class differences and make common cause with consumer rights groups, animal activists, and farmers' organizations.

Cows and Buffaloes: The Place of Milk in Diets, Livelihoods, and Religion

Milk and milk products have been a part of diets on the Indian subcontinent for millennia (Achaya 1998). Butter, ghee (clarified butter), yogurt, paneer, milk-based sweets, as well as milk by itself, figure centrally in popular ideas of what is “good to eat.” The aroma of cumin seeds sizzling in hot ghee is one of the signature scents of subcontinental cuisine. While most Indians eat eggs, fish, and meat, many cannot afford to eat these regularly. Although there are significant differences between regions, classes, religions, and castes (Natrajan and Jacob 2018), milk products and pulses are the chief sources of protein in most Indian diets. Indians who are lacto-vegetarians, around 30 percent of the population (*ibid.*), tend to belong to Hindu high castes such as Brahmin and Baniya. Their higher status endows vegetarianism with a superior cultural value.³ Within a caste-based alimentary code, milk is supreme.

Rearing milch cattle—cows and buffaloes—has been integral to mixed agropastoral livelihoods as well as specialized dairying by specific castes such as the Yadav, Ahir, and Gujjar in north India. Milk is always described as “good for you”—not only as an essential source of nutrients that modern science identifies as protein, calcium, fats, and vitamins, but also for being “wholesome” and “pure.” Hindus believe that milk products such as ghee ritually purify other foods, transforming the raw/profane (*kachcha*) into cooked/sacred (*pakka*). During rituals, Hindu priests pour ghee into the sacred fire as an offering to Agni, the fire god. Among the most widely practiced forms of Hinduism are various Vaishnav cults that celebrate Krishna, the cowherd god who frolicked in the forests of Braj, playing the flute and flirting with adoring cowgirls (fig.1). Central to this cosmology is the Indian cow: Zebu (*Bos indicus*). In Hindu mythology, the churning of the cosmic ocean is believed to have yielded Kamadhenu, the sacred cow who can fulfill all desires. The cow is mother (*gau-mata*). She epitomizes the ideal of selfless giving and nurturing. Feeding cows and looking after them are acts of pious charity for Hindus.

Notably, no such beliefs surround the buffalo, even though buffalo milk is widely consumed and valued for its creamy whiteness, its higher proportion of fats and non-fat solids giving it a satisfying richness. For dairy farmers, buffaloes are more profitable animals since they yield 4.1 to 6.4 kg of milk per day on average, which is much more than the 2.7 to 3.3 kg per day from desi cows (Rampal 2022). Buffaloes also lactate for longer periods and the higher costs of their upkeep are recovered by the higher prices obtained by the overall larger and fattier milk yield. As “the backbone of India’s milk supply” (*ibid.*), buffaloes are respected and cherished as “economic animals,” but they are not revered (Hardy 2019). That sentiment is reserved for the cow.

The opposition between the white cow and the black buffalo is tinged with casteist and racist connotations (Ilaiah 2004). The Sanskrit word for caste—*varna*—also



Figure 8.1: Krishna playing the flute with *gopis*, ca. 1790–1800, Guler/Kangra region.
Source: Free Gallery of Art/Wikimedia Commons

refers to skin color. All over India, fair skin is synonymous with beauty. It is associated with higher caste and class status. Kathryn Hardy points out that “These ... differences seep into everyday life, separating the buffalo and the cow as discursive resources for human comparison. In Hindi and Banarasi Bhojpuri, calling a woman a *bhains* or buffalo is an insult that alludes to corpulence, stupidity and a dark complexion” (2019, 1162). The symbolic devaluation of the buffalo contrasts sharply with the praise accorded to the cow in everyday life. Cows are described as intelligent and gentle. Historian and newspaper columnist Mukul Kesavan notes that there is “a specifically Hindu sentimentality about Indian cows. For Hindus, the *desi* cow is a beautiful thing. Its large eyes, its calm, its matte skin tinted in a muted palette ... its painterly silhouette with its signature hump, make it the most evolved of animals” (2015). Beauty, a superior sensibility, and generosity—these attributes make the cow more than an animal. She is at once human, divine, *and* bovine.

The Cow in the Cultural Politics of the Nation

In the past, many Hindus, including high-caste ones, ate cow meat. However, over the last 150 years, this practice has come to be regarded as anathema. During this time, Hindu religious groups have mobilized to convince their fellow-believers that eating beef is a sin. So prevalent has this belief become that most upper- and middle-caste Hindus consider eating beef to be the ultimate violation of their *dharma* (righteousness). As a corollary to this, they regard any Indian who eats cow meat with revulsion and disgust. In this fraught food politics, protection of the sacred cow has been a rallying point for Hindu supremacist groups (Govindrajan 2018; Jakobsen and Nielsen 2024). “Protection” entails looking after old and infirm cows and, importantly, preventing their killing.⁴ In the past, cows that had stopped giving milk were sold to traders who would slaughter them and sell the meat, hide, horns and bones for further processing. The fact that this trade was mostly in the hands of Muslims meant that “cow protection” was conveniently harnessed for the political project of Hindutva (Hindu nationalism), with its demonization of Muslims as Other (Vyas 2022, 11–24).

Even before the rise of Hindutva in national politics in the 1990s, most Indian states (with the exception of West Bengal, Kerala, Goa, and the states in northeast India) had banned cow slaughter. This led to a flourishing interstate movement of cows to the states where slaughter was allowed. In many places, the law was also widely undermined by a clandestine local economy of beef (Staples 2020). After the Hindu nationalist Bharatiya Janata Party (BJP) formed the national government in 2014, it enacted legislation against interstate trade and transportation of cows. At the same time, a larger number of states banned the consumption of beef (ENS 2015). With the BJP in power and backing them, young men have formed vigilante *gau-rakshak* (cow-protector) squads to stop cow smuggling and slaughter. Their raids terrorize cattle transporters, many of whom happen to be Muslims and Dalits, by extorting money, beating them up and, sometimes, killing them (Sinha 2024). Farmers can no longer sell unproductive cows and make some money, so they simply let them loose. All over north India, herds of feral cattle roam unhindered, entering agricultural fields and ravaging standing crops. No one dares to protest or take action because it would invite the wrath of the cow vigilantes. The widespread damage to the agrarian economy is particularly acute in the case of Muslim traders and Dalit artisans who have traditionally earned a living from selling and processing cow meat, leather, and bone. If the sacred cow inspires love and reverence amongst some, she now also evokes fear and dread among others.

Milk for All: Industrialized Dairying and Its Impacts

Inseparable from the apotheosis of gau-mata (cow-mother) is the economy and ecology of milk.⁵ As mentioned above, keeping cows, buffaloes, and goats has been an integral part of the small-holder farming that characterizes agriculture in India (Ramdas 2018). Feeding on crop residues and grazing on village pastures, their dung fertilizing fields, milch cattle not only provided milk but were part of an ecological loop that made low-input farming sustainable. As a perishable product in a hot climate where access to refrigeration was limited, most milk was locally consumed. Cream from excess milk was churned into butter and made into ghee, which extended its shelf life. The leftover buttermilk, which was full of proteins and minerals but had no economic or ritual value, was freely distributed to laborers and poorer families. Milk production and consumption were, thus, limited for the most part to farmers' immediate locality. However, the demand for milk from a growing urban population far outstripped what this mode of production could supply. Milk became scarcer in the summer months when most cows and buffaloes yielded less, mainly due to heat stress. Until the 1970s, the government would ban the commercial production of milk-based sweets in the summer months so that milk would be available to domestic consumers. Despite this restriction, milk had to be rationed. Depending on its size, each urban household was given a token for the amount that it could buy from a government milk depot.⁶ In a country where the Hindi phrase "*jahaan doodh ke nadiyan behti hain*" [where rivers of milk flow] is used to convey a land of prosperity, and where the phrase "*doodho nahaa, phalo pooto*" [Bathe in milk, give birth to sons] is commonly used to bless young women, the scarcity of milk denoted not just a dietary lack but a larger state of deprivation in which aspirations to the good life went unfulfilled.

In January 1970, the Indian government launched Operation Flood. Billed as the largest dairy development program in the world, it was financed by the European Economic Community (EEC) which donated its surplus skimmed milk powder and butter oil to India, while the World Bank gave additional funds. The EEC provided technical assistance for crossbreeding Indian cows with European breeds of the species *Bos taurus*, such as Jersey and Holstein-Friesian, that were bred to reach puberty earlier and give much more milk.⁷ To boost milk production, the program also focused on providing cows with green fodder and nutritional supplements like oilcake and soybean meal. Besides its scale, the unique selling point of Operation Flood was that it linked thousands of village-level cooperatives of dairy farmers with urban consumers in a national grid. Producers brought their milk to their cooperative's collection center and from there it was taken in trucks to a chilling plant. It then traveled in refrigerated tankers to the district dairy where it was pasteurized. Some milk was kept back for product manufacture while the rest was taken by tankers

to city dairies where it was recombined with the skimmed milk powder and butter oil donated by the EEC. Then it was packaged in plastic sachets or taken in tankers to bulk vending outlets for sale to customers thirsty for milk (George 1985a, 2166). Fittingly, the organization that the National Dairy Development Board established in 1975 to manufacture, market, and sell milk products was named *Mother Dairy*.

Within two decades, Operation Flood had transformed the milk economy in India (Scholten 2010). Production increased manyfold and middle-class urban consumers could indulge their desire for milk, yogurt, paneer, and ice cream to their hearts' content. India became the largest milk producing country in the world and the fact that it had done so by following a unique model of organizing farmers into cooperatives made this success story a legend in international development circles. Many called it the White Revolution, a name that echoed national pride in the Green Revolution, the project of resource-intensive farming launched in the 1970s that had made India self-sufficient in wheat and rice (Siegel 2018). The White and the Green Revolutions shared several common features: initial transfers of technology from industrialized countries as "international aid;" the resource intensification of production; the dependence on synthetic chemicals and pharmaceuticals; the creation of national commodity chains; the claims about the prosperity of farmers and the health of consumers. Like the Green Revolution, the White Revolution has been criticized for being ecologically unsustainable (Ramdas 2018); for increasing social inequality; for worsening diets and nutrition; and for choking off indigenous alternatives that were more accessible and sustainable (George 1985b). Regardless of whether they have large herds or small, it is undoubted that most dairy farmers are today embedded in an industrial mode of milk production. Not only are many of their inputs manufactured in capital-intensive processes, their output is processed and distributed through a capital-intensive, fossil-fuel dependent network. Most of all, gau-mata has become a milk-producing machine, bred for early puberty, frequent pregnancies, and increased lactation (Narayanan 2023).

The Rise of Cow's Milk

During most of this period, buffaloes provided the larger share of milk in India. With the spread of crossbred cows and subsidies from the White Revolution package, the share of cowmilk began to rise and, in 2020 and 2021, cows edged past buffaloes to become the chief producers of milk. According to the Department of Animal Husbandry and Dairying, most of this increase came from crossbred cows that on average yielded 7.2 kg per day, as compared to buffaloes' top yield of 6.4 kg (Rampal 2022). Most consumers still preferred buffalo milk for its creaminess; its higher fat and solids content made it more suitable for making yogurt (an everyday

practice in middle-class households), ghee, and paneer. However, as the supply of cowmilk increased, marketers seized an opportunity to capitalize on it.

Until the mid-2010s, Mother Dairy's plastic packets of milk were distinguished only by their fat content—skimmed, low fat, full cream—and price. The packets did not mention whether the milk was from cows or buffaloes. Since Mother Dairy bought fresh cow and buffalo milk in bulk, processed it to adjust the fat and solids content and, in the hot months from March to September, also sold milk that was either reconstituted and recombined,⁸ it did not actually reveal exactly what was in the packet. The firm currently sells 2.5 million liters of milk every day in Delhi, controlling 66 percent of the branded milk market. Its profits are based on mass-production of standardized products of assured quality, with flexibly sourced inputs. As long as the product fulfilled the Food Safety and Standards regulations, it did not matter whether the milk was fresh or recombined, buffalo or cow. Yet, in 2016, Mother Dairy launched a new product: Cow's Milk.

Speaking at the launch of the new product, a top Mother Dairy executive said that "Cow Milk has been an integral part of our heritage which is well engrained in our tradition for its varied health benefits." He went on to add that "With evolving consumer needs, the awareness for Cow Milk has been increasing, paving way for its demand by mothers ..."⁹ This statement needs to be examined closely. Why did "consumer needs" evolve into an "awareness for Cow Milk"? Some of the affluent urban milk consumers that we spoke to mentioned that buffalo milk was "heavy." Its higher fat content, which was earlier valued as giving it a creamy, fuller taste, was now perceived as a drawback by people with sedentary lifestyles, struggling to stay slim and avoid heart diseases and obesity. Cowmilk was lighter, they said. Its benefits were not just physical; it made children more intelligent and mentally agile. One well-to-do woman from an elite Brahmin family said jokingly, "*Bhains ka doodh, bhains ki buddhi*" [If you drink buffalo milk, your brain will become like a buffalo's—slow and ponderous].

Was this upper-class desire to maintain a low-fat diet, mingled with the enduring upper-caste belief in the superiority of cowmilk, strengthened by the rising political discourse about the sacred cow? Did the coming to power of the BJP in 2014 and its promotion of pseudoscientific research on the magical properties of cow products play a role in shaping popular discourse (Balakrishnan 2021, Chandrashekhara 2020)? Definitive answers to these questions are hard to establish. However, the invocation of "heritage" and "tradition" by the Mother Dairy executive specifically in relation to the cow—and not the buffalo, which is equally a part of Indian heritage and much more so than the crossbred cow—is a tell-tale sign of the larger cultural politics that converged with capitalist production.

By 2019, cowmilk constituted approximately 25 percent of all of Mother Dairy's milk sales in the Delhi region. A milk vendor said that it was popular with teashop

owners because it was cheaper than full-cream buffalo milk and creamier than low-fat milk. He also pointed out that people believed that cowmilk was easier to digest and therefore suitable for young children. “*Bilkul maa ke doodh jaisa hota hai*” [It’s just like mother’s milk]. Shrewd pricing and a claimed affinity between human mothers and the cow indicate the profitable convergence of industrial capitalism and religion.

How Pure Is My Milk? Anxieties and Aspirations

Even as the White Revolution made milk available in larger quantities year-round to middle-class urban Indians, it also caused some consumers to wonder exactly what they were drinking. Even big brands such as Mother Dairy and Amul that stridently assert that they have stringent quality checks have been touched by scandal where samples of their milk were found to be substandard or adulterated.¹⁰ Besides the age-old practice of watering down the milk, a new range of harmful additives has proliferated: urea, melamine, detergents, hydrogen peroxide, ammonium sulphate, vegetable oil, and others (Azad and Ahmed 2016). Then there are the chemicals ingested by or injected into the cow—pesticides, antibiotics, growth hormones—that make their way into her milk. Realizing that even buying from established mass-market brands cannot guarantee purity, a section of well-to-do consumers began to patronize private firms that claimed to do a better job. Country Delight, for example, started in 2015 and announced “We are bringing fresh and natural back” with locally sourced, rigorously tested milk. Whyte Farms and the Farmery went one better by offering fresh organic milk, free from additives and preservatives. With prices that are 30 to 50 percent higher than that of Mother Dairy’s cowmilk, it is only the affluent who can afford such brands. However, since the industrialization of diets has meant that consumers are cut off from the commodity chains that feed them, they are willing to spend more if it assuages their anxiety about quality. Eating pure, fresh, and natural have become even more important since the COVID-19 pandemic when concerns about health and immunity from diseases inevitably led people to examine what they ate and how it was produced. Firms that can assure consumers that their products are pure are positioned to profit more per liter of milk.

This rising trend of cowmilk sales in India experienced an unexpected shift around 2020. As the pandemic heightened anxieties around food quality among consumers, there was a growing buzz around a new element in the milk discourse: A2. The A2 narrative started twenty years earlier in New Zealand when a milk company called the A2 Corporation started to highlight scientific studies that claimed a correlation between the presence of certain forms of beta-casein proteins in milk called

A1 and the occurrence of Type 1 diabetes in children, heart disease in adults, autism, and schizophrenia. The corporation marketed its own milk as having only the “safe” A2 protein variant.¹¹ Besides commercial advertising, public opinion was also influenced by the publication of the book *Devil in the Milk* which corroborated the claims about A1 bad and A2 good (Woodford 2007). Expectedly, the claim that milk with A2 protein was safer and superior to milk with A1 protein resulted in outrage from other milk producers in Australia and New Zealand whose Holstein-Friesian and Jersey cows produced milk with both A1 and A2 protein variants. They pointed to other scientific studies that found no link between A1 milk and chronic diseases. As the controversy spread to other milk-producing and milk-consuming parts of the world, the European Food Safety Authority examined the evidence and declared in 2019 that there was no causal link between the consumption of A1 milk and the incidence of non-communicable diseases. Yet, despite the debunking of its claims by authoritative regulatory bodies, the A2 milk company went on to acquire a significant market share in Australia as well as exporting to China. A few other Australian milk producers also decided to join the A2 milk bandwagon, labeling their product “naturally A2.”

As mentioned, the sale of milk labeled as A2, and the media buzz about its health benefits, only started in India in 2020. Those in the mass milk business were quick to denounce this new development. RS Sodhi, the chief executive of Amul, one of India’s largest cooperative-based milk companies, called A2 milk a “marketing gimmick” (Pandey 2021). He pointed out that 90 percent of all milk in India had A2 protein. All indigenous breeds of cows in India as well as nearly 50 percent of crossbred cows produced A2 milk. *So did all the buffaloes* (italics added; de Oliveira et al. 2021). Most of the milk being supplied in India was A2 milk by default. The boutique private firms who were packaging their milk as A2 and charging a 30 to 90 percent premium were, literally, milking a gullible public.¹²

In this context, science-based claims about the superiority of A2 milk came together with the (pseudo) science-based claims about the sacred cow’s magical properties. Consumers were told that milk from crossbred cows had the “bad” A1 protein. It was milk from indigenous breeds that had the “good” A2 protein. In other words, milk from “foreign cows” was bad for you while milk from desi cows (breeds of Zebu such as Gir and Sahiwal), was good for you. Only this was the pure milk of the gau-mata. (As expected, the buffalo—the backbone of the Indian dairy economy—figured nowhere in this narrative despite its milk having A2 protein.) The promotion of desi cowmilk by popular yoga gurus like Baba Ramdev and Acharya Manish may also have influenced consumers.¹³ In the mass market for milk that had seen cowmilk emerge as a differentiated product only in 2016, the invention of a new product called “Desi Cow A2 Milk” in 2020 was a remarkable marketing coup. This feat, however, could not have been achieved without the prior cultivation of a cultural field in which the sacred cow, mother to the nation, was already associated with goodness and purity.

The emergence of the A2 phenomenon led high-end milk producers like Country Delight, Whyte Farms, and Farmery, with their herds of crossbred cows, to also invest in desi cows. After all, the milk fetches a handsome premium that more than makes up for the lower yield. Interestingly, Country Delight has also started selling desi buffalo milk, its most expensive product category, even though *all* buffaloes in India are desi. Here desi connotes authenticity, wholesomeness, and a generic sense of being “good for you.”¹⁴ However, these firms also emphasized the hygienic condition in which the cows were kept and milked, the rigorous testing of milk, the “straight from the farm to your home” supply chain. Their websites feature drone footage of airy cowsheds, contented cows munching on fodder, gleaming milking machines, lab-coated technicians testing milk samples, uniformed delivery agents zooming off at break of day to visit customers, and mothers pouring out frothy glasses of milk for their children. While these images could be generic to any industrialized country’s promotion of milk (see Dupuis 2002, Wiley 2014), what is noticeable is the focus on the cow, the emphasis on showing that she is well cared for, that she is not a milk machine but gau-mata.

Marketing Milk, Selling Gau-mata

In her thesis on the politics of the Indian indigenous cow, Ananya Vyas studied the advertisements of four brands of A2 Desi Cowmilk, examining “the interplay of various cultural, religious, and scientific tropes” (Vyas 2022, 69). Three tropes were most prominent: the ecological, the religious and the biomedical. The trope of ecological virtue—land, animals, humans all flourishing together—was evident in the promotional text’s repeated use of “fresh,” “pure,” “natural,” and “organic,” often using these terms interchangeably. The firms also highlighted that their milk was “raw” and “unprocessed,” a clear contrast from mass-market firms like Mother Dairy and Amul whose plastic packets announce that their contents are “pasteurized,” “standardized,” and “homogenized.” While these terms promised mass-market customers that the product is hygienic and reliable, the elite customers for desi cowmilk gained confidence from an assurance about the *lack* of processing or alteration. This suggested that the milk was “closer to nature,” uncontaminated by industrial inputs and processes, and hence better for health. All the brands highlighted that the milk came in “eco-friendly glass bottles.” The sturdy, transparent bottle was not only recyclable but provided a tactile experience quite different from the opaque and squashy plastic packets in which mass-market milk was sold.

That this milk nourished not only the body but the Hindu soul was signaled by the emphasis that the cows were of “pure Indian breeds,”—sacred gau-matas untainted by the semen of foreign cows. Hindu sensibilities were further appealed

to by drawing attention to the care bestowed on cows: they are allowed to roam free, suckle their calves (a classic image of motherly love in Hindu India and a popular motif in calendar art), and are not subjected to the indignity of artificial insemination. The ethical treatment of desi cows touches a chord deep inside Hindu hearts, which is qualitatively different from the welfare of crossbred cows. The appeal is all the more attractive for consumers who live in urban environments where desi cows roam the streets and forage from waste dumps, ruminating rotting food and plastic bags (Baviskar 2011). By convincing potential customers that the cows are well looked after, these firms suggest that they are not only buying superior milk but also gaining the religious merit of serving cows (*gau-seva*).

Finally, almost all the promotional literature prominently features the term A2. Some mention it on their websites; others proudly proclaim it on the bottles. Some websites have a dedicated section explaining the difference between indigenous and foreign or hybrid breeds in which the key distinguishing element is the absence of A1 proteins in the former's milk. The scientific terms used in this section create a unified sense of authority, even as the discourse moves fluently between western biomedical, Ayurvedic, and Unani concepts, combining incompatible epistemologies (Langford 2002): the goodness of milk is extolled in terms of proteins and vitamins, as well as for balancing the humors and purifying the blood.

Vyas observes that the firms that only sell desi cowmilk tend to have names that invoke Hindu tradition. "For example, 'Vedic' in the name 'VedicWay' explicitly refers to Hindu scriptures. The word 'Way' in the brand's name implies that its products are located within a larger lifestyle—one validated by *divine* knowledge. Therefore, consuming this milk is likely to bring the consumer one step closer to the 'superior' path of a healthier, holistic *Vedic* lifestyle" (Vyas 2022, 74). Some of the websites quote Sanskrit verses from the scriptures about the virtues of cowmilk. Other websites point to the Zebu cow's prominent hump (absent in foreign and crossbred cows) to make the startling claim that it absorbs sunlight and converts it into minerals. Still others cite Ayurvedic texts to sell cow urine as a medicinal product and cow-dung cakes as the prescribed fuel for Hindu rituals. SwadeshiVIP, another enterprising firm whose name means "indigenous," not only sells cow products such as A2 milk and *panchagavya* (a blend of cowmilk, yogurt, ghee, urine and dung highly recommended in Ayurveda for its healthful properties) but also offers the opportunity to visit its farm and conduct cow-worship rituals, including the super-meritorious act of *gau-daan* (the gift of a cow to a Brahmin). Balancing tradition with modernity, it also offers its visitors a chance to "cuddle a cow" which it claims is a "wellness trend" that relieves stress and "promotes positivity."¹⁵ This menu of proposed activities ends with a surefire winner: Selfie with Cows & Calves.

Dairies and Diets: The Desi Cow at Home

We turn now from the discourse around desi cowmilk to the dairies themselves. Traveling south from Delhi and entering the neighboring state of Haryana, we are greeted by a giant signboard across the highway: ‘Welcome to Haryana, *jahaan doodh-ghee ka khaana*’ [where the food is rich in milk and ghee]. Urban English-speaking elites often refer to the alluvial plains of the river Ganga in north India as “the cow belt.” The term is pejorative, connoting rustic backwardness and resistance to change. This region is also the heartland of Hindutva politics which has polarized people of different religions and castes. This is also where a number of urban professionals are now returning to set up farms that are “sustainable, holistic, and ethical.” For their customers, the fact that these agrarian entrepreneurs “gave up” successful careers in the corporate sector indicates their sincerity and commitment. The desire to renounce material wealth and leave the rat race to pursue a meaningful life in harmony with the environment resonates with many people disenchanted with their world. The dairies run by these deep-pocketed dropouts do not seem to compromise on caring for the land and animals. Visiting them and buying their (very expensive) products offers a new way of connecting to the cow belt. Instead of distance, disdain, and suspicion about sharp practices, there is now a direct relationship where one can see the cows that one’s milk comes from and watch them being fed, watered, and milked. Along with the discourse about the health and environmental benefits of desi cow products, the experience of actually witnessing the lives of cows wields persuasive power.

Even amidst the densely built-up environs of Delhi, small dairies continue to flourish. Not all middle-class consumers buy Mother Dairy and Amul milk packets. Some prefer to patronize local *doodhvalas* [milk vendors]. Every morning and evening, one can see a steady stream of customers with *dolchis* [stainless steel canisters] swinging in their hands and entering the shed where cows and buffaloes are milked right in front on them. Several of them have said that packaged milk was made from powder. “It isn’t *asli* [real] milk. This milk I can see coming straight from the cow. *Ismein milaavat nahin hai* [There’s no adulteration in this].” At one such *gau-shala* [cow shelter] attached to a temple in east Delhi, customers bought milk and also came to feed the cows and, on ritual occasions, worship them. These acts of charity and piety exist alongside widespread neglect and cruelty as cows are allowed to wander the streets, grazing at rubbish dumps, at risk of being mowed down by speeding vehicles (Baviskar 2011). Yet these contradictions only seem to reinforce the belief in the redemptive power of individual acts of caring. At least *we* are trying to do the right thing, they declare.

The desi cow dairies on the outskirts of Delhi were far more spacious than the urban cowsheds but similar in their layout: under a high corrugated tin roof, the

cows were clustered along narrow troughs full of feed. Their calves were penned in a separate section, brought in for suckling briefly and then taken away. Nearby sheds held stores of fodder. The air was redolent with the smell of fresh dung spattered on the concrete floor below the cows' feet from where it was swept and piled up in a great heap. The caretakers emphasized that cows were only fed what was "natural" and local: corn, millets, sugarcane leaves, fresh vegetables, dried guar beans, and ground chickpeas. No hormones or antibiotics. At one of the farms, we saw workers hefting a large vat of protein-rich whey from making paneer and pouring it back into the cows' feed. All the dairies were remarkably clean and some had ingenious devices to repel flies and other insects attracted by the ever-present dung. "We don't spray any pesticides," the manager pointed out.

With more than eight hundred cows, Beeja Farm is one of the largest producers of organic desi cowmilk in the Delhi region.¹⁶ Bumping down the potholed lane off the highway, we traverse a peri-urban landscape of fallow fields and modest roadside homes that double as workshops and provision stores. Beeja Farm is a shady oasis. We chat with the owner, Anil Saini, in a cool, rustic-chic mud-and-cow dung plastered courtyard. Saini belongs to a prominent land-owning family in the village. His move from a white-collar job to dairying came after he watched a documentary film that lamented the dwindling numbers of the sacred cow; since mixed breeds had taken over, gau-mata had ritual value but rearing her was no longer commercially viable. This was Saini's epiphany. Determined to demonstrate that one could run a business centered on desi cows without government subsidies or charity handouts, *and* one that was environmentally sustainable, he bought a herd of Gir cows from western India and started selling their milk. Pointing to the wall posters which described (in English) the benefits of desi cowmilk, *panchagavya*, and medicines made with the distilled essence of cow urine, he explained how his diversified product range made his business profitable. Switching fluidly between Hindi and English, Saini moves equally fluently from citing Ayurvedic principles to Woodford's book *Devil in the Milk*. He is such an eloquent advocate for unpasteurized A2 desi cowmilk that my research associate and I, members of the same class segment that is his potential customer base, cannot help being impressed.

After drinking tea with Saini—"See how creamy it is? That's the desi cowmilk," he points out—we walk toward the cowsheds, past the row of motorcycles used to deliver milk to customers each morning. As we approach the compound fence, dozens of cows that were lounging about chewing the cud or nuzzling each other come toward us enquiringly. Each one is a rich chestnut brown—the distinctive color of Gir cattle—with the drooping ears and small horns characteristic of the breed. Their coats are glossy and clean, their doe eyes liquid with sentience. I reach out a hand to one as I would to a dog to scratch her under her ear but she twists her head away and licks my fingers, her gray sandpapery tongue a surprise. She is

beautiful. Am I being sentimental, as Mukul Kesavan observed Hindus tend to be in the presence of desi cows? My research associate is from northeast India, well outside the cow belt, and she is not as charmed by the animals as I am. But we agree later that they looked well fed and looked after.

Another dairy that we visited did not have an English-speaking interlocutor like Saini to show us around. Kumar, the caretaker who lived on the premises, was from rural Bihar. His first job was at a mattress factory in an industrial area. He left it four years ago to come to this farm. “At the mattress factory, although the pay was more, we also had to pay rent, and we used to constantly fall ill. The work felt like work. At this *gaushala*, we get paid less, but air is good, the food is fresh. We are healthy. And I like looking after these cows. *Yahaan alag anand hai* [There’s a different kind of joy here].” The dairy where Kumar worked doubled as a breeding center. Besides Gir, there were Sahiwal and Tharpakar breeds of indigenous cows and bulls, several with colorful beads strung around their massive heads (fig. 8.2). Not only did Kumar reel off their pedigree (and cost), he claimed that he recognized each one, no mean feat in a herd of eighty cattle. Pride and affection were palpable in his voice as he started calling out, “Lakshmi, Subhadra, Janaki, Priya, Sarita, Tejas, Katrina...” popular women’s names, sprinkled with those of film stars and Hindu goddesses.



Figure 8.2: Gir bull and cow at Swadeshi VIP farm. (Photo by Amita Baviskar)

It was Kumar who told us that desi cowmilk cured cancer. “Other milk gives you only *maans* [flesh], *yeh andar se taaqat deta hai* [this milk strengthens you from inside]. There was a cancer patient who took milk from us. He was cured within six months.” My mind flew to the food activist who had, with equal conviction, counted out the four White Poisons: refined flour, refined sugar, polished rice, and milk. Is milk a miracle food or a poison? The answer depends on the kind of milk, how it is produced, and who consumes it. In India, for millennia, milk has been naturalized and sacralized as good to drink. The introduction of industrial inputs and processing, the insertion of long-distance supply chains, and the adoption of crossbred cows has muddled that discourse. So have new maladies and dietary movements. Many affluent consumers now report being lactose intolerant, unable to digest milk because their small intestine lacks sufficient amounts of the enzyme lactase. Some say that they find A2 milk easier to digest. It is not clear why this should be so, since A2 is a protein and lactose is a sugar and their metabolic processes are different. What is apparent, however, is that consuming milk products causes them physical discomfort—feeling bloated, getting stomach cramps, diarrhea—and A2 milk seems to offer a cure. They reported feeling less sluggish, their skin clearing up, and generally feeling “lighter.” Only a tiny handful said that they had abandoned milk altogether and become vegan. Notably, none of the working-class and middle-class consumers that we spoke to mentioned being lactose intolerant or giving up milk. To them, veganism seemed like a rich people’s fad. Most complained about the quality of packaged milk and many debated the virtues of cow versus buffalo milk, but none said that one should stop drinking milk. However, common to all conversations across the class spectrum was a welter of conflicting claims and a surfeit of ‘scientific facts’ as each person tried to make sense of their food choices in an ocean of uncertainty.

Affluent consumers look to the desi A2 cowmilk dairies to contain this uncertainty and provide a reassuring counter-narrative. Anju Singh, a 45-year-old homemaker married to a banker, buys ghee from a firm called “The Way We Were,” its very name conjuring up a pre-industrial past of artisanal milk processing. “It’s much more expensive than other ghee brands in the market,” she says “But we love the taste. Just like the homemade ghee my mother used to make. They use original type of milk and traditional, very authentic ways.” Another consumer, a retired UN official who has milk delivered from The Way We Were, when asked which company supplied her milk, replied “It’s a *farm* in Noida,” emphasizing its agrarian character and underplaying the commercial nature of the enterprise. Several informants mentioned how expensive the milk was but went on to say, “You have to pay more for quality.” Quality, for them, mainly derived from the indigeneity of the breed of cows and nostalgia about small-scale production techniques.

A smaller set of well-to-do consumers highlighted that purity also lay in what cows were given to eat. “Organic is important to me. No pesticides, no fertilizers, no

hormones, no antibiotics. I don't want that stuff entering my body. Or my family's. My children eat out a lot. At least at home I can make sure that they get healthy food. A2 is good, sure, but it has to be organic," said Sandhya Sharma, a 56-year-old corporate executive and mother of two teenagers. Several informants mentioned the COVID pandemic as a turning point that made them more conscious about their diet. "It's all about building immunity. Gut flora and all that. Raw, natural, and unprocessed. I'm eating more millets, I'm drinking green tea. I thought of going vegan but I just can't give up *dahi* (yoghurt) and ice cream. So I buy organic A2 milk," said Surabhi, a 33-year-old television journalist.

"I don't really know if it's better for my health," said Disha. "But it's better for the cows." The 38-year-old lawyer works with an environmental justice NGO. When asked why she bought desi A2 cowmilk, she shrugged. "There's so much shit around us, so much shit we breathe in, we eat. Maybe the milk I drink makes no difference. My life is already shorter because I live in Delhi [referring to the impact of air pollution on life expectancy]. But what I'm paying extra for is a bit of kindness to cows." Disha has visited the dairy she gets milk from, "They don't inject oxytocin to get the cow to give more milk. They let the calf feed. When the cow stops giving milk, they let her be." More humane treatment of cattle goes against the grain of a dairy industry built on maximizing milk production by inducing back-to-back pregnancies, squeezing out every drop of milk, and discarding the animal when the yield declines. High-yielding milch cows frequently suffer from painful mastitis, a bacterial infection of the udders, which is treated with antibiotics and painkillers. Disha mentions Diclofenac, the most widely used painkiller in veterinary medicine, which has led to the near-extinction of vulture species across the subcontinent. The disappearance of these scavengers who fed on cattle carcasses has disrupted agroecological metabolisms, a profound shift brought on by the White Revolution. "There's so much that I can't change," said Disha. "But buying from ethical companies that treat animals well, that don't use chemicals—I think that matters."

Tradition, taste and nostalgia, concerns about their health and that of the planet, and the welfare of animals, were the reasons given by our informants to explain their switch to desi A2 (organic) cowmilk. All of them felt that it was worth spending significantly more on the product. As well-to-do people, they declared that "quality" was not something they would compromise on. Mingled with these beliefs was also, perhaps, a desire for distinction, the cultural capital gained and displayed by acts of discerning consumption (Bourdieu 1987). In everyday chitchat, as people talked about what they buy and use, a subtle game of one-upmanship is often at play. Notably, almost none of our informants referred to the religious importance of *gau-mata*, only to the physical, ecological, and ethical benefits of desi cowmilk. This contrasts with Vyas's research in the city of Ahmedabad in the western Indian state of Gujarat (2022) where some of her informants invoked the

divinity of the desi cow for Hindus when asserting that her milk was the best. The difference may lie in selection bias. The segment of affluent consumers that we interviewed in the Delhi region were friends and acquaintances and shared the same agnostic, areligious worldview as us researchers. Most of them were deeply averse to Hindutva politics and would avoid voicing any sentiment that suggested an overlap with cow-nationalism. Their silence skirted around the dilemma of reconciling support for “traditional” agro-pastoral practices with the divisive cultural meanings of the desi cow.

Ecological Sustainability and Animal Ethics: Critical Perspectives

Reading a draft of this paper, a friend asked, “All this is very well but, at the end of the day, isn’t it a good thing that there’s a growing market for milk from indigenous cows? Especially when it’s organic? OK, the A2 claim is probably nonsense but so what? So what if the focus is only on gau-mata and not buffaloes? Big deal. One has to start somewhere!” I end this chapter by examining this question: Does drinking milk from desi cows, propelled by a mix of religious, medical, ecological, and class-based values, lead to more ethical, ecologically sustainable dairying? Those who sell the milk, and many of those who buy it, say that it does. Seeking an informed but independent perspective, I consulted an agronomist and an ecologist who specialized in pastoral economies. The agronomist pointed out that these dairy firms were boutique establishments whose viability depended on charging prices that were much higher than what most urban consumers could afford. Their best practices—providing more humane living conditions for cows, feeding them organic fodder, avoiding the use of growth and lactation hormones—do not trickle down to other commercial dairies that supply the national milk grid since the latter’s milk production is geared to clearing minimal quality standards for maximum profits. “There is little regulation; they can get away with anything.” The A2 desi cowmilk segment was a minuscule part of India’s dairy industry; it could not influence the logic of the gigantic milk machine. She said, “These dairy firms make a go of it because they are run by well-off urban people. They have the financial capital *and* the social capital to invest in a network for a perishable product like milk. They spend a fortune on marketing. How many Indian farmers can do that? Even if they set up an organic milk cooperative, they can’t pull it off.” This dovetailed with what Anil Saini had told us: the owners of other dairies in the neighborhood came to visit Beeja Farm but, so far, none of them had moved to organic desi cowmilk. There was no demonstration effect. The agronomist was emphatic: We need to focus on transforming how millions of small-scale livestock-keepers rear milch animals and that push can only come from the government (see Ramdas 2018).

If the agronomist rejected the desi cow dairies as a role model, the ecologist I spoke to questioned the sustainability claims made about desi cowmilk. He explained that dairy firms that produce desi cowmilk draw on the rhetoric of indigenous breeds being “more suited to the local environment” but that meant only that they are more hardy and heat-tolerant, and less costly to care for. It did not mean that they were integrated into an agropastoral environment where soil, water, biodiversity, and the human population, were nourished by their relationships with each other in a more-or-less closed ecological loop (Pollan 2006). Being chemical-free was an improvement but not enough. “The bottom line is that it’s a milk monoculture. What is it giving back to the land?” he said. “Manure?” I ventured. The ecologist grunted impatiently, “That’s just one element. There are plenty of examples around the country of agrarian systems that combine land, water, crops, and livestock, forests and pastures, and energy for sustainable livelihoods. It’s a place-specific mosaic. It works because each part fits into the other. They support each other. The only thing is, it doesn’t generate much of a surplus, just enough to live on. Now, if your main goal is to produce one thing—milk—and that too for profit, you neglect the rest because it doesn’t matter so much to you. As long as your cows are giving milk that you can sell at a premium, you’re happy.”

Anthropologist and animal rights activist Yamini Narayanan would argue that indifference about the wider ecological consequences of dairying also extends to the cows. Even if desi cow dairies do not abuse their animals in the horrific ways that she documents in her book *Mother Cow, Mother India* (2023), there is still the systemic violence of depriving calves of their mother’s milk, starving male calves to death, and ‘disappearing’ cows once their yield declines:

It is impossible to be the world’s largest dairy farm without being among the world’s biggest slaughterhouses. It is impossible to sustain dairying, an industry which *requires* continuously impregnating and breeding ever larger numbers of animals, without slaughtering the “useless” males and the “spent” females. It would be uneconomical to divert resources ... towards [such] animals ... The profits from selling “unprofitable” cows and buffaloes from dairying are used to buy more of these animals for the milk sector (Narayanan 2023, 44).

According to Narayanan, everyone reacts with “moral affront” to the idea that dairying is inherently cruel (2023, 17). It is an open secret that male calves and barren cows must be culled but, so explosive is the issue of cow slaughter in north India, we could not get anyone to talk about it. Dairy owners said that, as their milk reduced, the cows were given away to poorer farmers. Others said that they sent their cows to charitable shelters where they were looked after in their old age. Unlike Radhika Govindrajan’s account of rural women in the Himalayan foothills

who lovingly cared for their animals but accepted their killing as a fact of life (2018), there seemed to be no possibility in the Hindu heartland of talking about a good death for a cow. To deny that death, and to draw a curtain across the work of Dalit and Muslim communities who dealt with its discomfiting reality, was essential to the success of the desi cow milk dairy. Devotion to gau-mata, beliefs about the purity of her milk and dedication to gau-seva (service) did not transcend the brute facts of running a business for profit.

Conclusion

In this chapter, I traced the career of the desi cow within the larger cultural politics of Hindu nationalism. I examined how the idea of the sacred cow informs a cultural field where milk from indigenous cow breeds has newfound appeal among elite urban consumers. Concerns about health, nutrition and food safety, animal welfare, and ecological sustainability figure large in this set of relations between dairy owners, marketers, and consumers. At the same time, the promise of “from our farm to your home” speaks to a yearning that food should form a face-to-face community; it should be produced and consumed at a scale that is intelligible and trustworthy. However, desi cow dairies that work within the commercial calculus of capitalism and their customers cannot escape the inherent contradictions of gau-mata being rendered a milk machine. The violence of culling calves and cows may occur behind the scenes but acknowledging it brings to light the paradox of the sacred that must be profaned. This is the touchstone that clarifies, as we say in Hindi, *doodh ka doodh aur paani ka paani* [milk from water, like wheat from chaff].

This begs the question: What would it take to create a more coherent and inclusive ecological politics around milk in India? Ideologically, it would mean extending an ethics of care beyond the sacred cow to other living beings. Besides the desi cow, buffaloes and hybrid cows should also not suffer being exploited to death. Practically, this would mean joining hands with animal activists to ensure more humane treatment of all animals. Integrating animals into an ecological loop would entail supporting farmers’ organizations that practice diversified, low-input agropastoral livelihoods. Since these yield a smaller surplus, consumers will have to learn to be content with less, eating fewer milk-based sweetmeats for instance. Those who protest that poor Indians need more milk protein in their diet must be made to re-examine the emphasis on vegetarianism and the violence of caste and religion-based proscriptions that stigmatize eating meat and criminalize eating beef. Above all, it would mean taking on the behemoth that is the national industrial dairy grid and dismantling it by changing laws, incentives, and subsidies. The desi cowmilk market has emerged from the awareness that there is something deeply

wrong in what we eat and how it is grown. Transforming that ethical, emotional, and physical discomfort into an emancipatory ecological politics requires reaching out to others and transcending class, caste, and religion to embrace the Other. The desi cow can be credited for starting that conversation.

Notes

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- ² I use the plural 'we' when referring to my research associates and me.
- ³ The cultural politics of vegetarianism is a complex topic to summarize. See the special issue on "Food: Memory, Pleasure and Politics" in *South Asia: Journal of South Asian Studies* 31 (2008) for articles that analyze the changing dynamics around this practice. Also see Jacob and Natrajan 2020 for an informative statistical outline of these changes.
- ⁴ Notably, protection is not extended to male calves or bulls. Most male calves of the Zebu are killed or starved soon after birth. In the past, many were reared to adulthood to be castrated and used as draught animals for ploughing and pulling carts but, with the spread of tractors and motorized vehicles, the use of bullocks has declined significantly.
- ⁵ As well as cow dung and urine. See Münster this volume.
- ⁶ In Delhi, these milk booths were started in 1959 by the Delhi Milk Scheme of the Department of Animal Husbandry and Dairying.
- ⁷ Unlike most species, *Bos indicus* and *Bos taurus* can interbreed. Cross-breeding was necessary since pure-bred European cows cannot tolerate tropical heat.
- ⁸ Recombined milk is a homogenized product made by mixing milk fat, non-fat milk solids and water, while reconstituted milk is made by mixing whole or skim milk powder and water. See the National Dairy Development Board webpage (<https://www.nddb.coop/cnddb/milk-z-facts>).
- ⁹ Mother Dairy press release, June 21, 2016.
- ¹⁰ For instance, see these news reports from 2015: <https://www.thehindu.com/news/national/nw-detergent-found-in-mother-dairy-milk-sample/article7322460.ece> and 2018 <https://www.financialexpress.com/india-news/delhi-milk-consumers-alert-amul-mother-dairy-samples-found-sub-standard-water-milk-powder-was-mixed/1156244/>
- ¹¹ In 2004, the company was fined in Australia for making misleading health claims.
- ¹² These claims and counterclaims are reflected in the sudden shifts in the Indian government's regulatory policies. On August 21, 2024, the Food Safety and Standards Authority of India (FSSAI) issued a notification stating that the "use of any A2 claims on milk fat products is misleading" and producers should remove such claims from their products and websites immediately. Five days later, however, the FSSAI withdrew the order, stating that "further consultation and engagement with the stakeholders" was required (Kaul 2024). One can only imagine the hectic lobbying that must have preceded both these decisions.

- ¹³ In a YouTube video, Acharya Manish claims that buffaloes were deliberately introduced to India by the British to make the natives dumb and docile; see <https://www.youtube.com/watch?v=O-oQDUC54-CQ>.
- ¹⁴ The opposition between *desi* and *vilayati* foods, plants and animals, fertilizers, fabrics, and other items of everyday life has a lineage that stretches back to colonial times. See Gold and Gujar 2002.
- ¹⁵ See SwadeshiVIP's website: <https://swadeshivip.com/visit-farm>. Accessed May 20, 2024.
- ¹⁶ The names of farms and informants have been changed to maintain anonymity except when the information is drawn from websites in the public domain.

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