

Dark and Dairy¹

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Kamadhenu, the mythical cow of yore, would be puzzled by India's interactions with her descendants. India has been making national and international headlines because of its soaring beef exports (BBC, 4 May 2014; Times of India, 30 July 2014)⁵. The domestic tumult about the treatment of cows has focused on the rights and wrongs of killing animals that are sacred to many people in the sub-continent. However, while there might be ambivalence about India's place in the beef market, there is more or less unquestioned pride about the nation's status as the world's largest producer of milk⁶. On the one hand, we have riots over rumours of cow slaughter, while on the other, the consumption of milk and milk products such as curd, ghee and butter is a near universal habit in India, probably more so among vegetarians than others, as indicated by National Sample Survey data⁷. India has a long tradition of Ahimsa, in which compassion for nonhuman animals plays an important role. We revere cows as mothers because we use their milk. But if our dairy practices are any indication, we don't treat our mothers well.

It's clear to everyone that meat comes from a slaughtered animal. It's much less obvious that dairy production is as traumatic and lethal to animals. Attention to the biology and economics of dairy farming shows that beef and milk are two sides of the same coin, especially in India where cattle and buffaloes are farmed primarily for milk. There are no 'beef' animals in India - the Indian Livestock Census (2012) classifies cattle and buffalo as milch, draught or breeding animals. Yet, bovine meat constitutes 62% of India's total meat production, with buffalo and cattle contributing more or less equally to the figure⁸. Beef, in India, is sourced from the dairy industry which, as we shall see, becomes economically sustainable only because it is supported by the meat and meat by-products industries. The beef industry in India wouldn't exist without dairy farming. The same goes for the leather industry which is the second largest in the world; this industry credits cattle and buffalo as one of the main sources of 'raw material' for its annual output of 2 billion square feet of leather⁹. Therefore, if we care about cattle, we should first look into the lives of milch animals, including buffaloes which account for nearly 55% of the country's total milk production.

The dairy system inflicts suffering at every stage. Let's start at the beginning, with the calving process. Whether extracted by milking machines in a large dairy farm, from sitar-listening cows in organic establishments, or from an animal that is hand-milked at your doorstep, milk comes from a

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⁵ <http://www.bbc.co.uk/news/business-27251802>; <http://timesofindia.indiatimes.com/business/india-business/Beef-exporter-confidence-returns-in-India/articleshow/39279183.cms>

⁶ Food and Agriculture Organisation, *Dairy Gateway: Milk Production*, Available at: <http://www.fao.org/agriculture/dairy-gateway/milk-production/en/#.VCaCvhaTGHg>, Last accessed: 27 Sept 2014; APEDA, Govt. of India, *Dairy Products*, Available at: http://www.apeda.gov.in/apedawebite/SubHead_Products/Dairy_Products.htm, Last accessed: 27 Sept 2014.

⁷ Damodaran H and Kulkarni V, 2012, How vegetarian are we really? *Business Line*, January 2.

⁸ APEDA, *Indian Meat Industry Red Meat Manual*, Available at: http://www.apeda.gov.in/apedawebite/MEAT_MANUAL/Chap2/Chap2.pdf, Last accessed: 09/10/2014

⁹ Council for Leather Exports, *Leather Industry - Overview, Export Performance and Prospects*, Available at: <http://www.leatherindia.org/about-council/industryatGlance.asp>, Last accessed: 09/10/14

cow or a buffalo that has calved recently. For dairy farming to be financially viable, animals are made to calve at least once a year (for cows) and once in 15 months (for buffaloes). The calf himself or herself awaits a lifetime of misery starting with the first few days of existence.

Calves, male and female, are separated from or at the very least significantly restricted from accessing their mothers 3 – 4 days after birth, instead of the 7-14 months in a natural setting. This separation is deeply traumatic for both mother and calf, and also bad for the calf's health, but is nonetheless carried out for a very simple reason: a 15-30% increase in milk availability for humans when calves are weaned rather than suckled¹⁰. Following separation, calves are mainly fed on milk substitutes; this is less expensive than letting their mothers feed them without restriction. The mother's milk is instead diverted for human consumption.

The calves' trauma continues after weaning. Male calves are of no use except as breeding animals. But since a single bull is sufficient to impregnate multiple female cattle, most male calves are either sent for slaughter or turned loose to starve. Some male calves are shunted off to work as draught animals - they are subject to castration (without anaesthesia), nose-roping, and whipping, and a life of hard labour till they are old and weak, at which point they are sent for slaughter or abandoned. The economic undesirability of male cattle is evident in the stark gender imbalance in bovine populations in India – 64.42% female and 35.57% male in cattle, and 85.18% female and 14.8% male in buffalo¹¹. The slaughter of male calves – whether intentional or incidental - is integral to milk production.

Female calves, if healthy, are kept alive for use in the dairy industry. When the female calf becomes a cow, she enters the cycle of milk production. The only way to keep a cow “productive” is to keep her lactating. For this, animal husbandry manuals recommend re-impregnation around 60 days after calving – a longer calving interval will be uneconomic, and a shorter interval will reduce milk production because of physiological impacts on the animal. Impregnation is increasingly carried through artificial insemination in order to enhance reproductive efficiency. India's current National Dairy Plan aims to use artificial insemination on at least 35% of all fertile animals in the country by the end of the year 2017, which will require the production of at least 100 million doses of semen annually (from the current 66.8 million doses)¹². Artificial insemination for animals is not the sought-after reproductive luxury that it is for human beings. In cattle, it involves extracting semen from selected bulls and forcibly placing the same in the vaginas of restrained cows using invasive techniques. This technology is used to breed animals that yield higher and higher volumes of milk; it also reduces the need for bulls and thus further enables the routing of male calves for slaughter or abandonment.

After a lifetime of violence comes the inevitable conclusion, since dairy farming involves the killing of unproductive, infertile and 'spent' cows and buffaloes. Milk production starts to decline after 3 – 4 lactations (pregnancies). At this stage, cows and buffaloes are either passed onto middlemen who sell them for transport to states where slaughter is legal, or are sold to a smaller farmer who will use

¹⁰ Kamboj M L and Kumar A, 2013, Effect of weaning on performance and behaviour of calves and their dams in dairy cows – A review, *The Indian Journal of Animal Sciences*, Vol. 83, No. 10, Available at: <<http://epubs.icar.org.in/ejournal/index.php/IJAnS/article/view/33839>>; Last accessed: 27 Sept 2014.

¹¹ Ministry of Agriculture, 19th Livestock Census-2012: All India Report, Government of India, 17th June 2014.

¹² National Dairy Development Board, *Animal Breeding*, Available at <http://www.nddb.coop/English/Services/AB/Pages/Animal-Breeding.aspx>; Last accessed: 27/09/2014

them for an additional 2 – 3 lactations before selling them for slaughter or abandoning them because of the financial burden they pose. An infertile or unproductive animal shares the same fate, only much earlier. India's world-beating output of 132.4 million tonnes of milk in 2012-13¹³ would not have been possible if female cattle and buffalo were taken care of for the entirety of their natural life-spans which can range between 15 – 18 years. None of this, of course, takes into account the impacts of practices such as the use of the hormone oxytocin to increase yield or the painful repercussions of milking by hand or machine, such as chronic mastitis.

Dairy cattle have a terrible choice: life can be nasty, brutish and short, if you are male - or nasty, brutish and slightly longer, if you are female. Beef is an inevitable consequence of dairy. The data bears out our hypothesis. Figures provided by National Dairy Development Board from 2004-5 to 2011-12 shows¹⁴ that the monetary value of milk production almost tripled in this period. The monetary value of beef production almost tripled as well. In fact, the statistical correlation between the value of milk and beef production is .986. Put another way, there's a 98.6% match between milk and beef production over the years.

Furthermore, both qualitatively and quantitatively, a milch cow or buffalo has a worse life than an animal bred solely for meat which is sent directly for slaughter without first going through repeated cycles of forced impregnation, childbirth, separation from calves, and painful milking. Why, then, do we believe dairy to be better than beef? Why is vegetarianism touted as the appropriate response to concern about animal wellbeing?

Part of the explanation lies in psychology. Meat is more obviously linked to the death of a fellow creature. A milk drinker has a more tenuous and less visible connection to the wellbeing of the animal. The impacts of dairy are easier to ignore; they are more easily veiled by narratives such as how it is only 'surplus' milk that is taken, or how the Indian veneration of the cow as a mother ensures its wellbeing. And of course the buffalo which provides more than half the milk that we consume as a nation doesn't figure in any of these debates. Neither do the environmental consequences¹⁵ of dairy farming, whether pollution caused by runoffs, greenhouse gas emissions, or high water footprints (nearly 1000 litres of water go into producing and marketing 1 litre of milk)¹⁶.

Ultimately, Indian vegetarianism is primarily about us rather than the vulnerable creatures we claim to care for. We may prefer to turn our eyes away from the connection between our individual acts of drinking our filter coffee or morning chai and the cow or buffalo that produced the milk. The logic, however, is clear: drinking milk causes as much suffering as eating meat, if not more. Milk is bloodier than meat.

¹³ National Dairy Development Board, *Milk Production in India*, Available at <http://www.nddb.coop/English/Statistics/Pages/Milk-Production.aspx>; Last accessed: 27/09/2014

¹⁴ National Dairy Development Board, *Value of Output from Livestock Sector*, Available at <http://www.nddb.org/English/Statistics/Pages/Livestock-Sector.aspx>; Last accessed: 09/10/2014

¹⁵ World Wildlife Fund, *The 2050 Criteria: Guide to Responsible Investment in Agricultural, Forest, and Seafood Commodities*. Available at <http://www.worldwildlife.org/publications/the-2050-criteria-guide-to-responsible-investment-in-agricultural-forest-and-seafood-commodities>, Last accessed: 27/09/2014

¹⁶ Allan T, 2011, *Virtual water: tackling the threat to our planet's most precious resource*. IB Tauris.