

Shri Narendra Modi ji,
Honourable Prime Minister of India
Prime Minister's Office,
South Block, New Delhi- 110011

30 December 2025

Subject: Roadmap for the Humane & Effective Management of Stray Cattle

Dear Honourable Prime Minister,

I am writing on behalf of People for the Ethical Treatment of Animals India (PETA India) and our over two million members and supporters to share the enclosed ***Roadmap for Humane Management of Stray Cattle in India*** ('Roadmap') prepared in response to the current national discourse on stray cattle and in keeping with religious and cultural respect for these sacred animals in India.

The Roadmap is a humane and pragmatic blueprint for managing the nation's cattle population, developed by experts in veterinary science, animal welfare, nutrition, and law. Importantly, the Roadmap takes into account the factors contributing to the growing number of stray cattle and offers specific, actionable recommendations on how to address them—measures that will improve animal welfare while also benefitting public health and the environment.

In its order dated 7 November 2025, the Hon'ble Supreme Court directed that all stray cattle found on highways be removed and permanently housed in shelters (gaushalas). This direction, however, is **impracticable as a standalone measure**. Gaushalas across the country are already overcrowded and under-resourced, and cattle removed from highways are rapidly replaced by other animals abandoned by dairies. This results in a **continuous cycle of capture and abandonment**, leading to an ever-increasing number of stray cattle on India's roads. Relocation to gaushalas alone merely shifts the problem without addressing its root causes.

Cattle abandonment is carried out predominantly by dairy operators and is further compounded by weak enforcement of existing laws. Male calves are routinely abandoned shortly after birth, while female cattle are discarded once their milk yield declines—which is around a quarter to a third of their natural lifespan. These practices allow private commercial actors to externalise the costs and other burdens of animal care and stray cattle management onto the public and government.

Poorly regulated and illegal dairies, along with overcrowded gaushalas, also pose serious public-health risks. Close confinement, lack of sanitation, and inadequate veterinary care facilitate the spread of zoonotic diseases, including brucellosis, bovine tuberculosis (*Mycobacterium bovis*), leptospirosis, salmonellosis, and pathogenic *Escherichia coli* infections.

Against this backdrop, the enclosed Roadmap proposes substantial enhancement of penalties for cattle abandonment to ensure that they operate as an effective deterrent; the imposition of criminal liability, including custodial sentences for repeat or habitual offenders to underscore that abandonment constitutes a serious offence involving cruelty to animals, public endangerment, and public-health risk; the closure

PEOPLE FOR
THE ETHICAL
TREATMENT
OF ANIMALS
INDIA

PETA India
PO Box 28260
Juhu, Mumbai
Maharashtra 400049
022 40727382

Info@petaindia.org
PETAIndia.com

Entities:

- PETA US
- PETA Asia
- PETA France
- PETA Australia
- PETA Germany
- PETA Switzerland
- PETA Netherlands
- PETA Foundation (UK)

Registered Office:
F-110, First Floor, Jagdamba Tower
Plot No 13, Community Centre
Preet Vihar, New Delhi
Delhi 110092

of illegal and unregistered dairies and the cancellation of registrations and licences of dairies found repeatedly abandoning cattle; and additional measures, including supporting Indian farmers and entrepreneurs through the production and consumption of milk made from nutritious millets and other plants grown in India.

On behalf of citizens concerned for the welfare of cattle, and on behalf of the animals themselves, PETA India respectfully urges that directions be issued to all relevant government bodies to review the enclosed *Roadmap for Humane Management of Stray Cattle in India* and incorporate its recommendations into national and State-level policies.

Thank you for your time and consideration. We would be pleased to assist your office as well as central and state/UT governments in any reasonable manner. I may be reached at KiranA@petaindia.org or 9619264382.

Yours sincerely,



Dr Kiran Ahuja,
Senior Manager, Vegan and Corporate Projects
PETA India

cc:

Shri Rajeev Rajan alias Lalan Singh

Hon'ble Minister of Fisheries, Animal Husbandry and Dairying
Ministry of Fisheries, Animal Husbandry and Dairying
Room No. 234, Krishi Bhawan
New Delhi – 110001

PEOPLE FOR
THE ETHICAL
TREATMENT
OF ANIMALS
INDIA

PETA India
PO Box 28260
Juhu, Mumbai
Maharashtra 400049
022 40727382

Info@petaindia.org
PETAIndia.com

Entities:

- PETA US
- PETA Asia
- PETA France
- PETA Australia
- PETA Germany
- PETA Switzerland
- PETA Netherlands
- PETA Foundation (UK)

Registered Office:
F-110, First Floor, Jagdamba Tower
Plot No 13, Community Centre
Preet Vihar, New Delhi
Delhi 110092

CIN: U74899DL2000NPL103217

Roadmap for the Humane Management of Stray Cattle in India

Prepared by:

Dr Kiran Ahuja, Senior Manager, Vegan and Corporate Projects, PETA India
Honorary Animal Welfare Representative, Animal Welfare Board of India

Dr Mini Aravindan, Senior Director of Veterinary Affairs, PETA India
Former Under Secretary, New Delhi Municipal Corporation

Meet Ashar, Legal Advisor and Director of Cruelty Response, PETA India
Honorary Animal Welfare Representative, Animal Welfare Board of India
Former Advisor to the Maharashtra Animal Welfare Board

Deepak Chaudhary, Director of Emergency Response, PETA India
Volunteer, Wildlife Crime Control Bureau
Former Honorary Animal Welfare Officer, Animal Welfare Board of India

Khushboo Gupta, Vice President of Policy, PETA India
Former Farm Animal Sub-Committee Member
Former Honorary Animal Welfare Officer, Animal Welfare Board of India
Former Member, Committee on Animal Husbandry, Feeds and Equipment,
Bureau of Indian Standards
Former Honorary Wildlife Warden, Wildlife Crime Control Bureau

Vikram Chandravanshi, Senior Policy and Legal Advisor, PETA India
Former Legal Advisor, Animal Welfare Board of India
Former Member, State Animal Welfare Board, Bihar

PETAINDIA

30 December 2025

Overview

To effectively address the population of cows and buffaloes on the streets of India, it is essential to better understand the factors contributing to their numbers and to include them in any management plan.

According to India's 20th Livestock Census (2019), the total stray cattle population was approximately 50 lakh (5 million).¹ The conspicuous presence of stray cattle on public roads is not an accidental or unavoidable phenomenon – it is a direct and predictable outcome of industrial dairy practices in India. For milk production, dairy operators repeatedly subject cattle to artificial insemination and continuous cycles of pregnancy. Male calves, who cannot produce milk, are routinely abandoned soon after birth. Female cattle are similarly discarded once their milk yield declines and they are no longer considered economically viable, which is around a quarter to a third of their natural life expectancy. This relentless cycle of reproduction and abandonment fuels the ever-increasing presence of cattle on streets, highways, and public spaces across the country.^{2,3,4,5}

The Prevention of Cruelty to Animals (Registration of Cattle Premises) Rules, 1978, mandate the registration of cattle premises in cities and towns with populations exceeding 1 lakh where five or more cattle are kept.⁶ Dairy businesses are also required to obtain registration or licences under the Food Safety and Standards Authority of India (Licensing and Registration of Food Businesses) Regulations, 2011, in addition to mandatory registration under local municipal laws.⁷ Despite this, enforcement remains weak, allowing thousands of dairies to operate illegally – without registration, oversight, or accountability.^{8,9,10} Research by World Animal Protection

¹ <https://www.pib.gov.in/PressReleaselframePage.aspx?PRID=1813802®=3&lang=2>

² <https://dairynews.today/news/indian-government-to-penalize-dairy-farmers-for-stray-cattle.html>

³ <https://www.ndtv.com/india-news/action-against-illegal-dairies-after-delhi-chief-minister-rekha-guptas-convoy-held-up-by-stray-cattle-8025210>

⁴ <https://www.hindustantimes.com/cities/lucknow-news/stray-cattle-illegal-dairy-farms-thrive-unchecked-101741462396170.html>

⁵ <https://timesofindia.indiatimes.com/city/bengaluru/bbmp-fines-stray-cattle-owners-rs-20l-in-5-yrs/articleshow/102554294.cms?from=mdr>

⁶ [https://awbi.gov.in/uploads/regulations/163309968469\(REGISTRATION%20OF%20CATTLE%20PREMISES\)%20RULES,1978.pdf](https://awbi.gov.in/uploads/regulations/163309968469(REGISTRATION%20OF%20CATTLE%20PREMISES)%20RULES,1978.pdf)

⁷ https://fssai.gov.in/upload/uploadfiles/files/Licensing_Regulations.pdf

⁸ <https://www.indiatoday.in/india/story/crackdown-against-illegal-dairies-civic-authorities-seizes-1023-stray-cattles-fines-95-dairy-owners-2338833-2023-02-24>

⁹ <https://timesofindia.indiatimes.com/city/jaipur/jmc-team-catches-41-stray-cows-seals-2-illegal-dairies/articleshow/125844460.cms>

¹⁰ <https://in.edairynews.com/stray-cattle-illegal-dairy-farms-thrive-unchecked>

estimates that up to 50 million animals suffer daily in poorly managed dairies, many of which operate illegally.¹¹

Efforts to remove or relocate stray cattle to gaushalas fail to address the root cause of the problem, as gaushalas are already severely crowded, underfunded, and overburdened and cannot absorb the continuous influx of abandoned animals generated by the dairy industry.^{12,13,14} Many gaushalas also operate as de facto dairies – both registered and illegal – thereby further increasing the cattle population and exacerbating overcrowding.¹⁵ Treating relocation of cattle to gaushalas as a solution merely shifts the problem without addressing the source of it.

The consequences extend beyond animal welfare and traffic safety. Poorly regulated and illegal dairies, as well as overcrowded gaushalas, pose serious public-health risks above and beyond those inherent in dairy production. Close confinement, lack of sanitation, and inadequate veterinary care facilitate the spread of zoonotic diseases such as brucellosis, zoonotic tuberculosis (*Mycobacterium bovis*), leptospirosis, salmonellosis, and pathogenic *Escherichia coli* infections.¹⁶

A June 2023 article titled “Bovine Tuberculosis in India: The Need for One Health Approach and the Way Forward” in *One Health* states, “The prevalence of bTB among farm and dairy cattle in India is estimated to be around 7.3%, which makes it a country with one of the largest infected herds in the world.” It further states, “Bovine TB also has a zoonotic and reverse component, which means that the disease can spread from cattle to human and from human to cattle. In a country like India, which contributes to nearly one-fourth of the global TB burden, the zoonotic aspect must be addressed so that the disease can be curbed.”¹⁷ A May 2020 article in *Tuberculosis* titled “A Review on Bovine Tuberculosis in India” likewise states, “Preventing and controlling bTB at the animal interface is pivotal to evade transmission to humans, increase food safety and guard the livelihood of the people.”¹⁸

Milk adulteration is also a huge and persistent public-health crisis linked to poor regulation of dairies. Recently, the Food Safety and Standards Authority of India (FSSAI) directed all states

¹¹ <https://www.worldanimalprotection.org.au/news/new-research-exposes-suffering-50-million-cows-and-buffaloes-illegal-indian-dairies/>

¹² <https://www.tribuneindia.com/news/jalandhar/cow-deaths-at-gaushala-activists-allege-neglect-by-authorities/>

¹³ <https://www.thehansindia.com/andhra-pradesh/ttd-executive-officer-responds-to-cattle-deaths-at-sv-goshala-962545>

¹⁴ <https://www.hindustantimes.com/cities/chandigarh-news/hoshiarpur-22-cows-die-in-gaushala-roof-collapse-101751037886458.html>

¹⁵ https://www.niti.gov.in/sites/default/files/2023-03/Gaushala-report-2_14032023.pdf

¹⁶ <https://www.cambridge.org/core/journals/journal-of-dairy-research/article/zoonotic-risks-of-pathogens-from-dairy-cattle-and-their-milkborne-transmission/CE68C141565DD53AE98B7AD38A979A15>

¹⁷ <https://www.sciencedirect.com/science/article/pii/S2352771423000150#:~:text=The%20prevalence%20of%20bTB%20in,industry%2C%20improved%20cattle%20rearing%20methods>

¹⁸ <https://pubmed.ncbi.nlm.nih.gov/32275234/#:~:text=Preventing%20and%20controlling%20bTB%20at,;%20Reverse%20zoonosis;%20Zoonotic%20TB>

and UTs to launch a special nationwide enforcement drive to curb adulteration and misbranding of milk and milk products over rising concerns concerning food safety and public health. The agency noted that illegal and unlicensed entities pose serious risks to consumers.¹⁹

As an example, in Singur (Hooghly district), West Bengal, a study of raw milk reported contamination with multiple bacteria of public-health concern – including *Escherichia coli*, *Salmonella* spp., *Staphylococcus aureus*, *Proteus* spp., and *Pseudomonas* spp. – highlighting the risk of milk-borne zoonoses when hygiene and handling are inadequate.²⁰ A study in Chennai, Tamil Nadu, screened 567 dairy samples and found *Salmonella* spp. in a number of samples. The confirmed isolates showed multidrug resistance, highlighting food-safety and antimicrobial-resistance concerns linked to hygiene and processing.²¹ Research from dairy herds in Punjab found that 34.3% of pooled raw milk samples were positive for *E. coli* and that 24.4% of the milk isolates were multidrug resistant – supporting the view that raw milk can act as a reservoir of drug-resistant bacteria when hygiene lapses and antibiotic misuse occur.²²

In India, antibiotics have been commonly used in cows and buffaloes for a variety of reasons, such as to treat infections – especially mastitis – and to prevent or control disease spread in herds or in some cases to promote growth.²³ To address the growing concern around antimicrobial resistance and the transfer of antibiotic resistance genes from animal to human microbiota caused, in large part, by the overuse of antibiotics in animals used for food, the FSSAI banned the use of specific antibiotics in the production of meat, meat products, milk, milk products, poultry, eggs, and aquaculture starting on 1 April 2025.²⁴ However, a poorly regulated dairy sector means poor regulation of antibiotic use. A 1 May 2025 article in *Nature* states, “Nearly a million people are dying in India each year from drug-resistant infections, many of which go untreated due to lack of access to the right antibiotics.”²⁵

Taking suitable steps to address the stray cattle population can have knock-on effects in improving public health and reducing pressures on the environment, as further detailed below.

The Way Forward: Addressing the Source, Not the Symptoms

The stray cattle crisis can only be resolved by targeting the dairy industry practices that cause it. Effective solutions must include the following:

1. A policy for effective penalties for abandonment of cattle, holding all dairies accountable for animals they breed and abandon

¹⁹ <https://www.ndtv.com/india-news/fssai-food-regulator-asks-states-to-launch-drive-against-adulterated-milk-products-9828115>

²⁰ https://animalmedicalresearch.org/Vol.11_Issue-2_December_2021/MICROBIAL%20CONTAMINANTS%20OF%20RAW.pdf

²¹ <https://arccjournals.com/journal/asian-journal-of-dairy-and-food-research/DR-2078>

²² <https://www.frontiersin.org/journals/veterinary-science/articles/10.3389/fvets.2025.1553468/full>

²³ <https://www.sciencedirect.com/science/article/pii/S0022030255950864>

²⁴ <https://indianexpress.com/article/opinion/columns/india-banning-specific-antibiotics-production-meat-poultry-milk-products-9970236/>

²⁵ <https://www.nature.com/articles/d44151-025-00075-5>

While many countries have a dairy industry, the widespread presence of stray cattle is unique to India. The presence of cattle on Indian roads is not inevitable; it is largely an outcome of dairies that simply abandon cattle on roads and weak law enforcement, allowing illegal, unregulated dairies to thrive.

Dairy operators breed cattle continuously to enable milk production. Male calves, who have no commercial value in the dairy industry, are often abandoned shortly after birth because they cannot produce milk. Female animals are retained only as long as they are productive – up to the third or fourth lactation.²⁶ That is, 4 to 8 years old, a fraction of their natural lifespan of about 20 years or more.²⁷ Once their milk yield declines or when they fall ill or become injured, the cost of feed, veterinary care, and housing exceeds their economic value to the dairy. At this point, many operators deliberately abandon these animals on public roads, highways, or vacant urban land, often at night to avoid accountability. Many others end up slaughtered, either in illegal slaughterhouses or transported or smuggled to places where they can be killed. There are an estimated 32,000 illegal slaughterhouses in India.²⁸

Abandonment allows dairies to externalise the cost and responsibilities of animal care onto the public. Stray cattle scavenge for food in garbage dumps, sometimes eating plastic, which can cause painful colic and often death. They wander onto roads and become involved in traffic accidents or face other harsh fates. Municipal cattle pounds and gaushalas are then forced to absorb the financial and logistical burden of caring for animals who were bred for the business profit of dairies, even though these institutions are already overcrowded and underfunded. In effect, abandonment is a cost-saving mechanism for dairies for both legal and illegal dairies.

The **Prevention of Cruelty to Animals Act, 1960**, already recognises abandonment as a form of cruelty. However, abandonment is a non-cognisable offence and penalties for abandonment are rarely enforced and are currently too low to act as an effective deterrent. As a result, abandonment remains a low-risk, high-reward practice for dairy operators.

Therefore, these gaps must be addressed with the following steps:

- **Mandatory microchipping for identification and traceability of cattle to the dairy of origin – a modernised and humane system aligned with efforts of the National Digital Livestock Mission, enabling authorities to assign responsibility for abandoned animals²⁹**
- **Substantially increasing monetary penalties for abandonment to ensure they act as an effective deterrent**
- **Criminal liability, including custodial sentences for repeat or habitual offenders, to signal that abandonment is a serious offence involving cruelty, public endangerment, and public-health risk**

²⁶ https://agritech.tnau.ac.in/animal_husbandry/animhus_economic%20character.html

²⁷ <https://thehumaneleague.org.uk/article/how-long-do-cows-live-naturally-vs-on-factory-farms>

²⁸ <https://www.scirp.org/journal/paperinformation?paperid=46296>

²⁹ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2204580®=3&lang=1>

- **Closure of premises and cancellation of registration and licenses for dairies found repeatedly abandoning cattle**

2. Closure of Illegal Dairies

Illegal dairies operating without mandatory registration or licences or without complying with animal welfare and food safety laws are a key source of cruelty to animals, stray cattle, and unsafe milk. Such establishments function outside regulatory oversight, routinely violate applicable standards, and evade accountability for abandonment, disease, and contamination. Allowing them to continue to operate poses ongoing risks to animals, public health, and public safety.

There must be **immediate closure of all illegal dairies** found operating without valid registration or licences under applicable laws, including the Prevention of Cruelty to Animals (Registration of Cattle Premises) Rules, 1978; FSSAI regulations; and municipal rules and bylaws. Closure should be accompanied by **substantial effective penalties**, scaled to ensure that non-compliance is not viable.

Most importantly, **all animals housed at illegal dairies must be confiscated at the time of closure** to prevent further cruelty, abandonment, or concealment of offences. Confiscated animals should be transferred to recognised shelters or rehabilitation facilities, with the **cost of their care, transport, and veterinary treatment recovered from the offending dairy operators**.

3. Preventing Gaushalas From Breeding Animals

Gaushalas are frequently portrayed as a solution to the stray cattle crisis. In practice, many gaushalas are overcrowded, underfunded, and incapable of absorbing the continuous influx of abandoned animals. More concerning, a significant number actively contribute to the problem by engaging in breeding and milk production, thereby increasing cattle numbers rather than reducing them.

Findings from *Gau Gaatha*, a national investigation conducted by the Federation of Indian Animal Protection Organisations across 179 gaushalas in 13 states and two union territories, show that many gaushalas function as de facto dairies.³⁰ Despite being established for the protection and care of animals abandoned by dairies, these institutions often continue breeding cattle and extracting milk under the justification of “self-sustainability”. Such practices directly fuel population growth, worsen overcrowding, and undermine the stated purpose of gaushalas.

The commercial orientation of these gaushalas also leads to unequal and harmful allocation of resources. “Productive” animals are prioritised for fodder, space, and veterinary care, whereas old, sick, disabled, and non-lactating cattle – the primary intended beneficiaries – are neglected.³¹ This results in severe animal suffering and misuse of public funds and charitable donations that were intended for the care of abandoned cattle.

³⁰ <https://drive.google.com/file/d/1FQ784Mre2wOFJX1EB1ewf7DvrV2jUo3-/view>

³¹ <https://pmc.ncbi.nlm.nih.gov/articles/PMC7070297/>

Furthermore, many gaushalas solicit donations by appealing to religious faith and public trust, creating the reasonable expectation that contributions support lifelong shelter and protection. When breeding and milk production occur within these institutions, donors and the public are misled, and gaushalas effectively replicate the same economic logic that drives abandonment elsewhere – valuing cattle for output rather than welfare.

To prevent gaushalas from contributing to the stray cattle problem, the following measures are necessary:

- **Prohibit breeding in gaushalas**, including artificial insemination and any practices intended to increase cattle numbers.
- **Ban commercial milk production, sale, or distribution** from gaushalas to ensure that they do not operate as dairy enterprises under the guise of homes for abandoned cattle.
- **Legally restrict gaushalas to their core mandate** of sheltering and caring for already abandoned, aged, sick, disabled, or infirm cattle only.
- **Impose penalties and corrective action**, including withdrawal of recognition or funding, against gaushalas found engaging in breeding, milk production, or other commercial dairy activities.
- **Establish clear regulatory oversight**, including periodic inspections by state animal welfare board inspectors, to ensure that old and infirm animals are receiving due care.

Without these safeguards, gaushalas become another link in the chain of poor cattle management.

4. Reducing Dependence on Animal-Based Milk

According to researchers at Sanjay Gandhi Post Graduate Institute of Medical Sciences, three out of four Indians are lactose intolerant and are unable to digest milk properly.³² Because milk is infant food, the Physicians Committee for Responsible Medicine explains, “Infants and children produce enzymes that break down lactose, the sugar found in breast milk and cow’s milk, but as we grow up, many of us lose this capacity.”³³ Symptoms of lactose intolerance include stomach pain, bloating, diarrhoea, or other feelings of sickness.³⁴ Many people, including babies, are also allergic to bovine milk.³⁵

Doctors also warn of potential health risks associated with the consumption of bovine milk and milk products. Health concerns include heart disease, type 2 diabetes, Alzheimer’s disease, and an increased risk of breast, ovarian, and prostate cancer.³⁶ Meanwhile, the Academy of Nutrition and Dietetics, the world’s largest organisation of

³² <https://timesofindia.indiatimes.com/city/lucknow/three-out-of-four-indians-have-no-milk-tolerance-study/articleshow/46522488.cms>

³³ <https://www.pcrm.org/good-nutrition/nutrition-information/health-concerns-about-dairy>

³⁴ <https://www.nhs.uk/conditions/lactose-intolerance/>

³⁵ <https://www.asterhospitals.in/blogs-events-news/aster-rv-bangalore/cows-milk-protein-allergy-cmpa-babies-under-diagnosed-entity-india#:~:text=Share,address%20few%20frequently%20asked%20questions.>

³⁶ <https://www.pcrm.org/good-nutrition/nutrition-information/health-concerns-about-dairy>

food and nutrition professionals, notes that “vegans are at reduced risk of certain health conditions, including ischemic heart disease, type 2 diabetes, hypertension, certain types of cancer, and obesity”. (Vegans are vegetarians who do not consume any animal-derived foods such as eggs and dairy.)

Meanwhile, a study conducted by the Indian Institute of Technology Delhi and the Deenbandhu Chhotu Ram University of Science and Technology, Murthal, affirmed that methane produced by India’s cattle population, considered the world’s largest, can significantly raise global temperatures.^{37,38}

A sustainable and long-term solution to the stray cattle crisis therefore lies in gradually reducing dependence on animal-based milk while promoting plant milk production and consumption. Given the high prevalence of lactose intolerance and milk allergies in India, alongside growing evidence linking dairy consumption to chronic diseases and environmental harm, this transition would directly address public health and climate concerns. At the same time, encouraging the production and consumption of indigenous plant-based milks made from millets, cashews, coconut, groundnuts, soy, rice, and other locally grown crops would diversify diets, create new income streams for Indian farmers, support agri-processing industries, and stimulate entrepreneurship. Such an approach offers an animal-friendly, environmentally sustainable, health-conscious, and economically viable pathway for India. Work in this direction has already begun in the country. For instance, a special millet-based ice cream was developed by the Thanjavur-based Indian Institute of Food Processing Technology.³⁹ And Indian companies producing milk, yogurt, cheese, or ice cream made from plants include So Fit, So Good, Nourish You, Alt Co, Better Bet, Only Earth, Plan B, Soft Spot Foods, Veclan, Chetran’s, White Cub, Yoogutty, Siri House of Vegan Ice Cream, Minus 30, Nomou, NOTO, and The Brooklyn Creamery, among others.

Well-formulated plant-based milks can provide protein, healthy fats, complex carbohydrates, and, where included, dietary fibre, which is absent in animal milk. Ingredients such as grains, legumes, nuts, and seeds commonly used in plant milk production naturally contribute minerals such as iron, calcium, magnesium, and zinc. Many plant-based milks are also fortified with calcium, vitamin B₁₂, and vitamin D – nutrients commonly associated with animal milk – allowing them to meet daily nutritional needs. In addition, plant-based milks are naturally free from lactose and cholesterol and do not involve the use of veterinary antibiotics or growth hormones used in animal agriculture, which may increase the risk of cancer in humans, making them suitable for the wider population, including those seeking improved digestive comfort,

³⁷ <https://www.scidev.net/asia-pacific/news/methane-from-indian-livestock-adds-to-global-warming/>

³⁸ https://www.researchgate.net/publication/396566636_Livestock_Population_Trend_Analysis_in_India_A_Censual_Review_of_Last_Decade

³⁹ <https://www.smartfood.org/project/non-dairy-millet-ice-cream-is-not-only-tasty-but-nutritious/>

reduced chronic disease risk, and more animal-friendly and sustainable dietary choices.^{40,41}

Encouraging more plant-based milk production and consumption would directly reduce abandonment by decreasing the unsustainable demand that drives continuous breeding and the disposal of cattle. At the same time, plant-based milk production is free from public health risks inherent to dairy production and animal agriculture, including zoonotic disease transmission, antibiotic resistance, and contamination associated with unhygienic dairy environments.

Plant-based milks require significantly less land, water, and environmental resources than animal dairy, making them better suited to India's climate constraints and water stress.^{42,43} Millets and other indigenous crops are climate-resilient, support biodiversity, and provide farmers with income streams that are not dependent on the lifelong upkeep of animals.

For this transition to succeed at scale, government policy must actively incentivise the production and consumption of plant-based milk and other plant dairy-like products. This could include the following:

- **Targeted subsidies and transition grants for farmers shifting from dairy to plant milk-focused crops and processing units**
- **Viable training, resource, and infrastructure support for farmers to set up plant-based milk processing and distribution units**
- **Inclusion of plant dairy-like products in other agricultural and entrepreneurial incentive schemes**
- **Encouraging consumption of plant milks through public nutrition awareness programmes**
- **Encouraging the use of plant-based milks in schools, hospitals, and government offices**
- **Revising dietary guidelines and advisories to explicitly recognise plant-based milks as healthy and acceptable**
- **Engaging nutritionists, dieticians, and public-health experts to promote plant-based milks as nutritionally adequate and aligned with modern health recommendations**

⁴⁰ <https://agritech.tnau.ac.in/edition%2015%20indian%20dairy.pdf>

⁴¹ <https://www.bcphp.org/resource/rbgh-rbst/>

⁴² <https://www.mdpi.com/2071-1050/13/22/12599>

⁴³ <https://iffs.earth/stateofdairy/>

Conclusion

Making new policies under existing laws to penalise abandonment, shutting down illegal operations, and implementing strategic incentives to reduce the load on the dairy sector would pave the way for the following:

- A significant reduction in stray cattle abandonment
- Improvement in food safety and public health
- Aligning India's food systems with climate and other environmental goals
- Creating new business opportunities for India's farmers and entrepreneurs