OUR SHARED FUTURE

Securing Animal Welfare, Human Wellbeing and Sustainability in India

INDIA ANIMAL FUND

dasra

The question is not, 'Can they reason?' nor 'Can they talk?' but, 'Can they suffer?

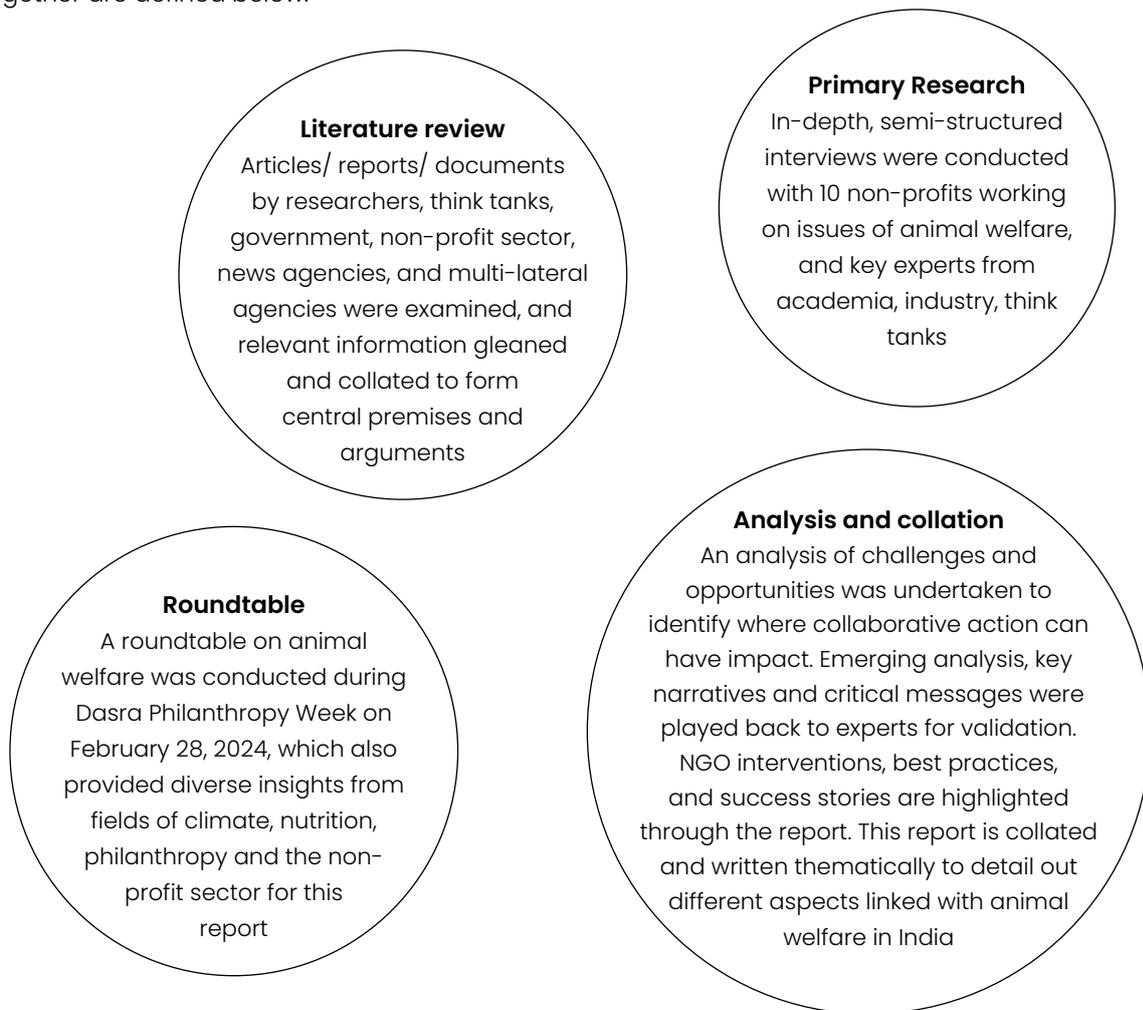*–Jeremy Bentham, Philosopher, Jurist, and Founder of Modern Utilitarianism*

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Note on methodology and limitations

This report looks at animal welfare in India from the perspective of the Five Freedoms Framework[1], which were established in 1965 and outline the societal standards for the treatment of animals in human care, delineating the essential conditions for their welfare. The report assesses dominant practices in the four key segments of animal use in India (farmed animals, working animals, community animals, and animals used for testing and experimentation) against the Five Freedom framework, highlighting the gaps which exist on the ground, as well as the challenges which human communities face while trying to implement welfare.

The report was completed using a mix of primary and secondary research. The different steps involved in putting the report together are defined below:

Literature review
Articles/ reports/ documents by researchers, think tanks, government, non-profit sector, news agencies, and multi-lateral agencies were examined, and relevant information gleaned and collated to form central premises and arguments

Primary Research
In-depth, semi-structured interviews were conducted with 10 non-profits working on issues of animal welfare, and key experts from academia, industry, think tanks

Roundtable
A roundtable on animal welfare was conducted during Dasra Philanthropy Week on February 28, 2024, which also provided diverse insights from fields of climate, nutrition, philanthropy and the non-profit sector for this report

Analysis and collation
An analysis of challenges and opportunities was undertaken to identify where collaborative action can have impact. Emerging analysis, key narratives and critical messages were played back to experts for validation. NGO interventions, best practices, and success stories are highlighted through the report. This report is collated and written thematically to detail out different aspects linked with animal welfare in India

Limitations

The data available is largely qualitative, and the knowledge gleaned is based on stakeholders' work on the ground. While this may reflect certain biases, this report strives to document evidence from a holistic perspective.

List of figures, case studies and success stories

Foreword

Dr. KP Krishnan
Former Secretary to Government of India in the
Ministry of Skill Development & Entrepreneurship

The year 2023 was pivotal for Indian cinema and storytelling on the global stage, with the stars of the show being the animals inhabiting India's forests and cities, alongside their humans. India brought home an Oscar for The Elephant Whisperers – a documentary about a tribal couple caring for orphaned elephants in Tamil Nadu's Mudumalai Tiger Reserve, and over 50 international awards for the documentary All That Breathes – the story of Wildlife Rescue, a non-profit providing emergency healthcare to native wildlife in Delhi. Both films were notable as they centred animal welfare with utmost sensitivity towards the unique dimensions it takes in India.

Notwithstanding this scale of global reach, resonance and success, animal welfare on the ground in India continues to be a complex, fraught and elusive goal. A simple statistic helps contextualise this: the total population of just farm animals, community animals, and working animals exceeds that of the human population in the country – this is discounting the wildlife population in India. Billions of animals and millions of human beings come into varying degrees of close contact for food, companionship, livelihoods and survival daily.

"Our Shared Future: Securing Animal Welfare, Human Wellbeing, and Sustainability in India" shows the interconnectedness between the welfare of animals, humans and the planet. A collaborative effort between The India Animal Fund (IAF) and Dasra, this report is a testament to the power of the collective voice—from animal welfare practitioners to non-profits, philanthropists, corporates and experts.

Within these pages, we find a profound truth: the welfare of animals is intricately intertwined with human health and environmental sustainability. From our cities to villages, the normalization of intensive animal use necessitates a paradigm shift. It is time to reduce, refine and replace the use of animals in multiple sectors. Emerging technologies offer avenues for transition, and various stakeholders, including the government and the corporate sector, must play a pivotal role in facilitating this shift.

Despite the potential for transformation, corporate CSR funding for animal welfare initiatives remains disproportionately low. Sustainability, encompassing coexistence with all species, must become a central tenet of corporate agendas. Corporates are urged to include animal welfare in their sustainability goals, gradually transitioning towards ethical value chains devoid of animal abuse. Philanthropists and foundations can further this impact by scaling up interventions, fostering a future defined by compassion, sustainability, and shared prosperity. As consumers, it is imperative for us to become more aware of the impacts of our choices on the planet, our health, and the animals.

Investing in animal welfare is an investment in our collective future—a future where all beings, human and animal alike, can thrive in harmony. May "Our Shared Future" serve as a catalyst for change, igniting compassion in our hearts and guiding us towards this vision.

As we become more conscious of sustainability, we need to internalize that sustainability includes co-existing with all species. All good causes require a coalition of interested citizens, non-governmental organisations, philanthropy, corporates, and government. The time has come for all of us to come together to harness emerging new technologies to facilitate the transition to an animal friendly ecosystem.

With gratitude and determination.

Over centuries, the use of animals as a commodity has become normalized in our society, leading to tremendous suffering which we as humans have come to accept without addressing the ethical concerns of inflicting untold pain on other living beings. It is time now to replace the use of animals as food or for work or for experimentation. New technologies are emerging and various stakeholders including the government, the corporate sector & philanthropists can play a key role in transitioning to the new technologies and create a world devoid of suffering for all species. The report is a very timely call to action to all stakeholders to engage with this crucial yet neglected cause.

–GV Prasad, Co-Chairman & MD, Dr Reddy's Laboratories

As a society we must co-exist with all the species. It's not just about the animals, it's also about humanity. Animal welfare intersects with many other causes like climate change, public health, food system transformation and land/water usage. I'm glad that Dasra & India Animal Fund have brought out this thoughtful and timely report. This is an important path to engaging with various stakeholders, raising awareness and bringing more philanthropic capital to this crucial yet neglected cause.

–Siddharth Sharma, CEO, Tata Trusts

For far too long, the silent suffering of animals has been a blind spot in our national consciousness and discourse. This report by Dasra-IAF sheds light on this critical issue, highlighting the undeniable connections between animal welfare and our own well-being. Moreover, it highlights practical solutions, better informed consumer choice, and policy reforms that can dramatically reduce suffering. Philanthropy has a crucial role to play in helping scale up these efforts. Let us embrace this opportunity to build a more compassionate and sustainable India, one that values the well-being of all creatures with whom we share this planet.

–Ravi Venkatesan, Ex-Chairman, Microsoft India

Animals are sentient beings and they feel pleasure and pain like we do. They are harmed and exploited away from the public eye. Most of us as consumers are not aware of the cruelty that lies behind the products and services we consume. As individuals, we need to become more aware of what we are consuming, and the impact that it has on the planet, our health and the animals.

–C K Venkataraman, Managing Director, Titan Company Limited

It is heartening to see the significant amount of systemic work that is being started in the area of animal welfare including research, policy reform & enforcement, creating talent and in incubating relevant NGOs in this space. There are a variety of interventions that are being executed by several credible organizations and passionate people to help the voiceless animals. Philanthropists and foundations can play a key role in making a sustainable impact by helping scale up these interventions.

-Aparna Uppaluri, COO, Tata Trusts

You and I feel the same pain and pleasure, anxiety and fear, joy and sorrow, just like animals, because we are all sentient beings. Just like us, animals deserve empathy and compassion. However, every single second millions of animals are killed, tortured, used, abused. They deserve empathy and compassion. We need to awaken our consciousness to shun any form of animal exploitation, by working together. One small step at a time can give animals the chance that they so deserve - to live, love and thrive on planet earth.

-Kalpana Das, Lawyer, Vegan advocate, Feminist, Nature lover

As a lifelong ambassador for animal welfare and conservation, I try and play my part in helping educate likeminded philanthropists on how they can help in this mission. How would you feel if your children and grandchildren grew up in a world where they only saw animals in history books? Find paw-sible you can help NOW.

-Rishabh Shroff, Partner & Co-Head, Cyril Amarchand Mangaldas

The sector is working in silos, and stakeholders are not coming together to share their specialised knowledge. If we can form a uniform body that shares knowledge, for example all organisations in a particular geography coming together on a frequent basis to share what is it that they are doing, how things can be improved. We need that level of organisation, collaboration and support in animal welfare.

- Divya Dinesh, Trustee, Ashraya Hastha Trust

> *Extending the lens of animal welfare maybe is a possible approach to take for CSR funding. If you're going to be working in a rural community, can your existing programmes extend a little further or can whoever is designing them also think about how to how to bring in animal welfare maybe a possible approach to take.*

–Sumit Tayal, Chief Executive Officer, GIVE Grants

> *We're not expecting marginalized people to turn vegan. We're expecting all of us who have the privilege to say, can we reduce and then replace our animal-based diet? There needs to be an equitable approach to consumption of meat for protein.*

–Bharati Ramachandran, Chief Execuitve Officer, FIAPO

> *If you can give 1% of your time, 1% of your money and 100% of your heart towards animal welfare, it will create a huge impact. Do whatever you can, however small, and over the weeks and years I guarantee there will be a noticeable impact and you will feel fulfilled. The community who like animals are vast and friendly, and will do their best to help us and animals co-exist harmoniously.*

–Tanya Thackersey, Executive Director, The Thackersey Group

> *I find that a corporate ethos that extends its compassion to animals creates a positive, empathetic, and sustainable ecosystem for all*

–Lea Pudumjee, Product Manager, Thermax Limited

Executive Summary

> ❝
> *What good is there in saving the body at the cost of minds and feelings hardened? It has been emphasised by the great teachers of humanity who have consistently said that life is dear to all creatures, and that he whose life is filled with compassion is indeed the noblest of all beings.*

–Rukmini Devi Arundale, First Female Rajya Sabha Member,
responsible for introducing the Prevention of Cruelty to Animals Act (1960)

Though India has historically demonstrated deep empathy towards animals, its animals find themselves caught in deeply intensive and exploitative systems in the present day. The resultant animal suffering, in and of itself a cause for concern, can also have critical cascades into human and environmental sustainability in both, the short and long terms.

How do connections between animal, human and ecological suffering manifest?

Public Health

Increased antibiotic resistance: Antibiotic resistance among humans is a direct consequence of antibiotic use in animal agricultural feed, associated with large-scale production. By 2050, drug-resistant diseases could cause up to 10 million annual deaths globally.[2]

Spread of zoonotic diseases: Intensive animal agriculture correlates with the spread of food-borne illnesses and zoonotic diseases. Approximately 60% of known infectious diseases and up to 75% of emerging infectious diseases are zoonotic in origin. Yearly, zoonoses are responsible for 2.5 billion cases of human illness and 2.7 million human deaths worldwide.[3]

Growth hormone use and effects on consumers: in the dairying sector, bovines are often injected with oxytocin to stimulate milk production. Not only is this a slow poison for the cow, disrupting their reproductive system and organs, but also causing ill-effects like early onset puberty among children.[4,5,6]

Climate Change

Increased Green House Gas Emissions (GHGE): Farmed animals contribute significantly to climate change, producing 14.5 % of the world's GHGE's and almost 60% of all food production emissions.[7]

Habitat loss and destruction: Factory farming requires ample land and fodder, which has led to deforestation and ecological imbalances. Practices like intensive fishing, for example, have disturbed the ecological balance of water bodies.[8]

Increased pollution: Contamination of water, soil, and air resulting from runoff of animal farms, abattoirs and allied facilities, and improper waste management affects communities living near these areas and the natural resources they rely on.[9]

Labour Welfare

Livelihood insecurity: Human communities who work the most closely with animals, are often vilified for the harms of animal husbandry despite being victims in the system. Failure to include their welfare and economic security when designing our food systems leads to further disenfranchisement of an already severely disadvantaged group.[10]

Intense occupational hazards: Neglecting the safety standards of working animals increases accident and medical burdens on those who closely care for them – typically marginalised and unorganised groups.[11] Furthermore, intensive systems also undermine their own occupational safety.

Child labour linkages: According to the United States Department of Labor, cattle products are among the most common goods produced using child labour, including in India.[12]

Mental Health

Trauma: Children who witness animal abuse are 3x more likely to develop a mental illness.[13]

Slaughterhouse workers often experience PTSD, anxiety, and depression due to their work, with no measures to support their mental wellbeing.[14]

Antisocial behaviour: Both petty and serious crimes are associated with a history of animal abuse.[15] Failure to prosecute animal cruelty leads to recurrence and desensitisation, emboldening perpetrators to believe they can get away with violent offences against both - animals and humans.[16]

Food and Water Security

Intensive and disproportionate resource use: Animal agriculture uses 77% of global agricultural land, but only provides 18% of the world's caloric supply and 37% total protein supply.[17]

Factory farming uses 1/3rd of the global freshwater supply for agriculture.[18]

How do we enable greater Animal Welfare in India?

Reduce consumption of and reliance on animal products

Replace animal use with alternatives

Refine the methods of production

Rehabilitate animals back into safe habitats
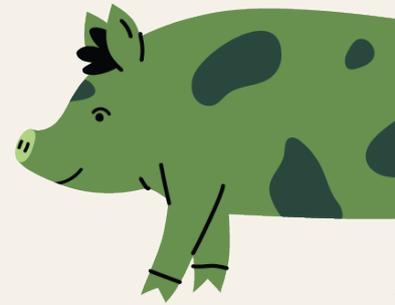
Our pivot from intensive animal use to alternatives can be guided by four catalytic levers

1 Awareness
Cultivating an evolved, contextual understanding of animal use and welfare and the implementation of animal welfare as a lens across situations, programs and sectors

2 Capital
Increasing financial support towards scientific and organised animal welfare research, programs, and practitioners, as well as supporting the uptake of technology to replace animal usage

3 Talent
Encouraging animal welfare careers among the youth, and capacity building efforts for those already practicing in the sector

4 Policymaking
Bringing thoughtful, scientific, and inclusive policy reform and implementation in consonance with on-ground realities in India

Collaboration and trusteeship: Influential stakeholders must come together to secure Animal Welfare, Human Wellbeing and Sustainability in India

Anchor	Action
Funders	Funding is essential for advancing animal welfare, with distinct roles for different types of funders. • Institutional funders can drive multi-stakeholder dialogues to address systemic challenges. • Individual philanthropists can contribute to building capacities of organisations working for animal welfare. • Infrastructure and talent attraction for positive change in animal welfare
Corporates	Integrating animal welfare into organisational sustainability means prioritizing ethical practices in supply chains, funding on ground programs which address the intersections between animal welfare, public health, worker wellbeing, and climate change, and extending welfare measures inclusively to workers and animals in the ecosystem.
Non-profits	Nonprofits can advance animal welfare in India by conducting context-specific research and collaborating with diverse organizations. They can advocate for policy reform grounded in grassroots recommendations and ensure the enforcement of existing laws to foster an inclusive narrative of animal welfare.
Government	Encouraging producer groups, to transition towards higher welfare systems, supporting farmers in animal husbandry to shift towards alternative agricultural products, creating a positive regulatory environment for startups and companies to innovate in alternative proteins and non-animal research, and promoting inclusive policies to address gaps in the law with a focus on intersections with worker welfare, public health, and the environment.
Citizens	Citizens can act at the individual level by adopting kinder, informed, and sustainable consumption practices and at the community level by being an active support system to urban local bodies, reporting animal welfare issues, and enabling the hyperlocal care and upkeep of community animals.

Intersections between Animal Welfare and Sustainable Development Goals

2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
6 CLEAN WATER AND SANITATION
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

Figure 1: The current spread of animal welfare projects in India

Immediate impact → **Long term impact**

Interventions	SDGs addressed	Case study reference
Rescue & rehabilitation Scaling efforts and establishing protocol for the safe and humane rescue, treatment and rehabilitation of needy animals	**SDG 11:** Sustainable Cities and Communities **SDG 15:** Life on Land **SDG 17:** Partnerships for Goals	• The Bharat Initiative for Accountability • Freagles of India • Feline Foundation • Raksha Foundation • Centre for Pastoralism • People for Animals Uttarakhand • Help in Suffering
Capacity building Supporting animal welfare organizations, workforce, and interested youth with financial support, training and networks to help scale their impact	**SDG 8:** Decent Work and Economic Growth **SDG 9:** Industry, Innovation and Infrastructure	• India Animal Fund • Ahimsa Fellowship • Society for the Prevention of Cruelty to Animals
Education & outreach Educating the public through media and educational institutions about the various uses of animals, animal welfare, and the alternatives	**SDG 2:** Zero Hunger **SDG 12:** Responsible Consumption and Production **SDG 17:** Partnerships for Goals	• The Good Food Institute India • Raksha Foundation • Physicians Association for Nutrition India • The Body Shop
Policy & advocacy Pushing for the enforcement of current laws and advocacy for policy reform	**SDG 16:** Peace, Justice and Strong Institutions **SDG 17:** Partnerships for Goals **SDG 15:** Life on Land	• PETA India • Brooke India
Research Investing in data collection, inter-sectoral research, and alternatives to intensive animal use from an India perspective	**SDG 2:** Zero Hunger **SDG 3:** Good Health and Well-being **SDG 12:** Responsible Consumption and Production	• The Good Food Institute India • Raksha Foundation • Physicians Association for Nutrition India • The Body Shop

India's Animal Welfare Movement : Intervention archetypes from across the country

In different parts of India, success in animal welfare is manifesting as a collective effort.

Policy & Advocacy

Pushing for the enforcement of current laws and advocacy for policy reform

Research

Investing in data collection, inter-sectoral research, and alternatives to intensive animal use from an India perspective

Rescue & Rehabilitation

Establishing and following protocol for the safe and humane rescue, treatment and rehabilitation of needy animals

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NGOs are collaborating with local governments to activate local animal welfare agencies, like Societies for Prevention of Cruelty to Animals (SCPAs), and the State Animal Welfare Boards (SAWBs)

NGOs are conducting research on animal welfare and working with communities which work closely with animals

NGOs have built SOPs for cruelty cases and regular functionality of SPCAs

Governments have banned gestation crates in piggeries

Clinical research institutes are training practitioners in Non Animal Testing Methods

SPCAs have started emergency helpline numbers for animal cruelty cases to actively address complaints

Court interventions have led to enhanced welfare measures for hill station equines

NGOs and SPCAs have devised animal birth control programs for street dogs, mandatory registration for pet dogs, and restrictions on importing foreign breeds

NGOs are advocating for increased budget allocations for animal welfare programs in local Animal Husbandry Departments

State governments and NGOs are implementing concrete solutions to end the issue of stray cattle

NGOs are advocating for extending the operational hours of state animal health centres from 6 hours to 12 hours, which is of great support to community animal and pet caretakers

NGOs, foundations and state governments have set up cutting edge and species-specific animal hospitals

NGOs have successfully influenced technical committees to notify and implement the Dog Breeding & Marketing rule and Pet Shop Rules

NGOs are advocating for the conversion of SPCAs from private to publicly held agencies

Capacity building

Supporting animal welfare organisations, workforce, and interested youth with financial support, training and networks to help scale their impact

Education & outreach

Educating the public through media and educational institutions about the various animal welfare issues, intersections, and conscious consumption

Model Districts are setting precedents for better implementation of animal welfare laws and policies through regular training and capacity building for local law enforcement agencies, and training Resident Welfare Organisations to mitigate conflicts between humans and street animals

NGOs have successfully advocated and provided technical support for the launch of the animal birth control programs in various underserved districts

The Ahimsa Fellowship has cultivated over 45+ animal welfare practitioners and leaders across India

NGOs and social enterprises are building the ecosystem for humane entrepreneurship, ethical consumption and better animal welfare standards in corportate value chains

NGOs and foundations are building ambassadors for whole food plant based diets as a remedy for lifestyle diseases

NGOs are translating animal welfare laws and policies into local languages to train police departments and animal husbandry departments

State governments and NGOs are partnering to conduct sensitization workshops in primary schools on the subject of animal welfare and compassion

The Central Pollution Control Board has been publishing guidelines for dairy and poultry units in newspapers for increased outreach

NGOs and concerned citizens from various districts have built a consortia for effective communication on cruelty to animals, emergency assistance and for outreach/ awareness regarding animal protection laws

Academic Insititutions have trained individuals on animal protection laws

The boundaries on this map are for illustrative purposes only and are intended for informational use.
This is an indicative list providing examples from all over India, it is not exhaustive. In addition to these interventions there exist several small scale interventions which are making meangingful transformations in the Animal Welfare space in India

15

Animal use and welfare in India

The definition of animal welfare has evolved over centuries, covering the animal's bodily health, physical environment and, importantly, sentience – the ability to feel.[19] It is now time to further expand our understanding of animal welfare, including its intersections with the health of the people, environment and planet.

Shared histories, shared futures: Animal Welfare is a critical piece of the puzzle in India's growth

While animal welfare is often equated with radical activism and sentimentality, it is grounded in principles of logic, sustainability, and strong ethics. It is as much about humans as it is about animals, and just as much about the air, water, and land – all critical to survival. As we consider India's emergence as a global superpower and the ethos that drives it, animal welfare holds tremendous significance - for its pursuit of the Sustainable Development Goals, public health, labour welfare, climate change resilience, and humanity. India has a unique, pluralistic history of human-animal co-existence and co-dependence, influenced by a complex interplay of social, economic, political, and geographical factors. Yet today, animal welfare is missing from its socio-economic practices, leading to discernible issues in the treatment of animals across sectors. This becomes an especially grave concern when we consider mounting scientific evidence that animals are sentient, conscious beings with an innate capacity to feel pleasure and pain.

Beyond wildlife, part of the everyday: Animals are deeply integrated in India's socio-economic landscape

Beyond forests, rivers and oceans, animals have also been key to India's agriculture, infrastructure, and scientific advancements. In our lived environments, and behind various value chains, products and services, are realities of large-scale and intense animal suffering – with a dotted line to each one of us.

The scale and intensity of animal suffering in India

Farmed Animals

India has over 3.8 billion animals that are part of an intensely confining and highly extractive industrialized agriculture sector and allied entities[20]

Working Animals

India has over 70 million working bovines and 300,000 equids, in addition to 200,000 camels and thousands of working elephants in cultural and tourism circuits[21]

Animals used in Experimentation

India has 1579 facilities registered to house animals for experimentation, but no official number on how many animals are in this sector is available.[22] Estimates suggest it is close to 1.2 million[23]

Community Animals

India has more than 80 million homeless animals including cats, dogs, horses, donkeys, and cows, most of whom are abandoned and now inhabit public places[24]

Unnatural lifecycles, immeasurable suffering: Delving deeper into the lives of these animals reveals intense, immense, endless, and often unnecessary suffering

Figure 2: The cycle of pain, fear, death

1 Commodification

The economic valuation of animals based on human utility has led to them treated as products, incapable of feeling pain – this makes it difficult for consumers to associate animal suffering with their products and consider their welfare[25]

2 Confinement

Growing demand for animal products has resulted in humans keeping them in confining and inhabitable conditions across sectors, inhibiting their natural behaviours and causing injury and painful death for the animals[26]

4 Insecurity

Loopholes in existing laws allow for many of these animals' lives to remain unregulated and unprotected, and low penalties for animal cruelty make it difficult to condition behaviours and implement even basic animal welfare on the ground[28]

3 Invisibility

Low awareness about animal use and associated suffering, means their issues remain hidden. This is exacerbated by their categorisation as profitable and unprofitable; while the former are more visible, both undergo grave suffering[27]

Key stakeholders: India's animal welfare action landscape

1 Government

National level regulatory and implementation bodies

Ministry of Forest, Environment and Climate Change; Ministry of Fisheries, Animal Husbandry & Dairying | Ministry of Agriculture and Farmers Welfare | Ministry of Health and Family Welfare | Committee for the Purpose of Control and Supervision of Experiments on Animals

State level regulatory and implementation bodies

State Animal Welfare Boards | State Wildlife Advisory Boards

District level implementation bodies

E.g. Government-run veterinary colleges | polyclinics and super-specialty hospitals | Urban Local Bodies | Societies for Prevention of Cruelty towards Animals (SPCAs)

2 Private Sector

Service providers

Private animal clinics | hospitals | colleges | universities | research firms | law firms | pharmaceutical companies

Businesses

Companies producing and selling alternatives to animal sourced products | pharmaceutical companies | animal breeders | dairy, poultry and meat producers | entertainment industry | companies that utilise animal products in their manufacturing and production processes

Funders

E.g. Foundations | Corporate Donors

3 Non-profit/ Non-government Organisations

International NGOs

Research and advocacy organisations | branches of international NGOs (like Humane Society International, Mercy For Animals and People for the Ethical Treatment of Animals) | think tanks | international funding platforms

Domestic NGOs

National level NGOs, collectives, and federations working across states (like People for Animals, Federation of Indian Animal Protection Organisations) | local NGOs | local animal shelters | animal rescue and rehabilitation centres | animal birth control groups | research and advocacy groups

4 Informal Actors

Voluntary groups

Resident welfare associations | religion/ spirituality-based groups | foster networks

Workers

Farmers | owners/ handlers | pastoralists, farriers | saddlers | animal laboratory technicians

Individual actors

E.g. feeders | rescuers | foster people | reporters

this is not an exhaustive list, but is meant to provide an overview and key examples for an enhanced understanding of the action landscape

Laws and policies governing animal welfare in India

General laws

Animal welfare as enshrined in The Constitution of India

Article 51A(g)   Article 48A   Article 21

Anti-Cruelty Laws

- *Prevention of Cruelty towards Animal Act (PCA), 1960*
- *Prevention of Cruelty to Animals (Care and Maintenance of Case Property Animals) Rules, 2017*
- *S. 428, 429 of the Indian Penal Code, 1860 (This will be replaced with s. 325 Bharat Nyay Sanhita from July 1, 2024)*

Environmental Law

- *The Environmental Protection Act, 1986*
- *Water Act, 1974*
- *Air Act, 1981*
- *Solid Waste Management Rules, 2016*
- *Hazardous Waste Management Rules, 2016.*

Labour Laws

- *The Contract Labour Regulation and Abolition Act,*
- *The Child Labour (Prohibition and Regulation) Act,*
- *The Occupational Safety (Health and Working Conditions) Code, 2020*

Laws Relating to Transportation of Animals

- *The Transport of Animal Rules, 1978*
- *The Transport of Animals on Foot Rules, 2001*
- *Central Motor Vehicles Act, 1998*
- *The Central Motor Vehicles (11th Amendment Rules), 2011*
- *Food Safety and Standards (Licencing and Registration of Food Businesses) Regulations, 2011 (Specifically for transportation of animals being slaughtered)*

*this is not an exhaustive list, but is meant to provide an overview and key examples for an enhanced understanding of the action landscape

Laws for Farmed Animals

Rearing: There are no specific regulations on this prescribing basic welfare standards (e.g. minimum space given to an animal), including those used in the dairy egg and meat industry. In the list of laws below only the Licensing and Farrier Rules deal with farmed animal welfare, regulating only the shoeing of cattle hooves. This is a significant concern because despite rearing making up the majority of an animal's lifespan, there is no regulation that prescribes minimum standards of care. Cattle Trespass Act, 1871 | The Prevention of Cruelty to Animals (Licensing of Farriers) Rules, 1965 | The Prevention of Cruelty to Animals | (Registration of Cattle Premises) Rules, 1978

Slaughter: The only animals that can be slaughtered for consumption within the territory of India are Ovines (sheep), Caprines (goats), Suillines (pigs), Bovines (cows), Poultry and Fish. All animals must be stunned prior to slaughter, no animal can be slaughtered in sight of another, every animal must be tested by a vet prior to slaughter for a "fit for slaughter" certificate. FSSAI Notification, Dated 6.08.14 | Rabbits were added to the list of animals that are permissible for consumption and slaughter in 2017 FSSAI Notification, Dated 12.08.17 | Prevention of Cruelty to Animals (Slaughterhouse) Rules, 2001 | Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011

Sale: Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 Milk and Milk Product Order, 1992 | Food Safety and Standards Act, 2006 | Prevention of Cruelty to Animals Act (Regulation of Livestock Market), Rules 2017.

Laws for Working Animals

The Prevention Of Cruelty to Draught and Pack Animals Rules, 1965. | Performing Animals (Registration) Rules, 2001 | s. 2(7A), 2(39) and 38H, of the Wild Life (Protection) Act, 1972 (All animal performances requiring wild animals must be registered with The Central Zoo Authority as a zoo. All local and roadside wildlife performances are illegal including snake charming, dancing monkeys and bears etc.) | Cinematograph Act, 1952 & Cinematograph (Certification) Rules, 1983 | Cable Television Networks (Regulation) Act, 1995 & Cable Television Networks Rules, 1994 (Specifically the Program and Advertisement Codes) | IBFs Content Code and Certification Rules, 2011 | Self-Regulation Guidelines, 2011: Certification Rules for the General Entertainment & Non-News & Current Affairs Television Channels | The use of Bears, Monkeys Tigers, Panthers, Lions in performances is prohibited | Ministry of Social Justice and Empowerment Notification G.S.R 619(E) dated 14.10.1998. | Bulls were added to the prohibited list of animals used for performance in 2011. | Ministry of Environment and Forest Notification G.S.R. 528(E) dated 11.7.2011.

Laws for Animals used in Testing & Experimentation

International standards and ancillary laws, rules guidelines and standards play a significant role in the regulation of animal testing. The information listed below is restricted to domestic laws, and animal welfare standards. A detailed timeline of policy and law milestones in this segment is provided in the chapter. | Breeding of and Experiments on Animals (Control and Supervision) Rules, 1998 | Drugs and Cosmetics (2nd Amendment) Rules, 2014 | The Cosmetics Rules, 2020 | Drugs and Cosmetic Act, 1945 | New Drugs and Clinical Trial Rules (2023 amendment)

Laws for Community Animals

ABC Rules, 2023 | The Prevention of Cruelty to Animals (Dog Breeding and Marketing) Rules, 2017 | Prevention of Cruelty to Animals Act (Pet Shop) Rules, 2018.
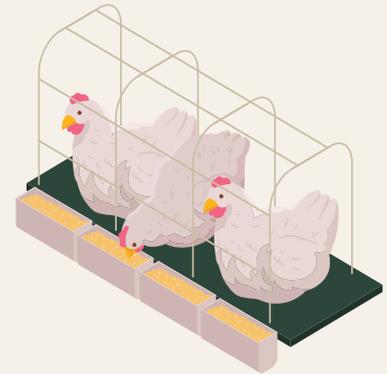
Examining the welfare of Farmed Animals in India

CHAPTER SNAPSHOT

The farmed animal sector includes over **4 billion** animals – bovines and birds. Given the social, political and economic complexity of farmed animal use in India, there is a need to align on sensitive ways to solve for welfare issues in this segment.

1

Issues of farmed animals

- **Confinement** in unsanitary and
- uncomfortable premises
- **Isolation** and inability to exhibit natural behaviours
- **Inadequate nutrition**
- **Painful** injuries and slaughter

2

As India becomes more affluent and its per-capita consumption of animal sourced products rises, it can have serious cascades, especially given its dense population. Though it is widely believed that animal protein is essential for humans, there is mounting evidence of adverse consequences of intensive farmed animal systems and animal sourced products (ASFs) on people and the planet:

Public Health: adverse effects of hormones used on animals, antibiotic resistance, zoonotic disease transmission

Climate Change: increased greenhouse gas emissions, biodiversity loss, and pollution of natural resources

Labour Welfare: workers experience trauma, insecurity, and unsafe conditions, and this sector has a high rate of child labour

3

Interventions spotlighted

- Promoting animal welfare in corporate value chains | **The Bharat Initiative for Accountability**
- Building an alternative proteins roadmap for India | **The Good Food Institute**
- Transitioning to more extensive and natural agriculture practices supported | **Sahjeevan - Centre for Pastoralism**
- Improving animal welfare and public health outcomes | **India Animal Fund** and **Physicians Association for Nutrition**

4

A roadmap for the enhanced welfare of farmed animals

- Adopting alternative proteins for the Indian ecosystem and demographic
- Enhancing animal welfare through policy and industry reform and consumer behaviour change
- Promoting equitable consumption while supporting sustainable agriculture and local economies
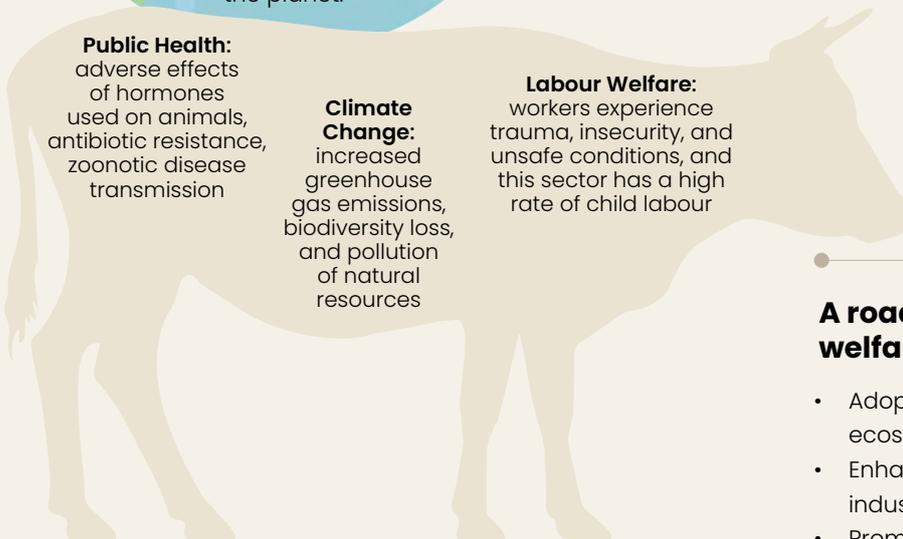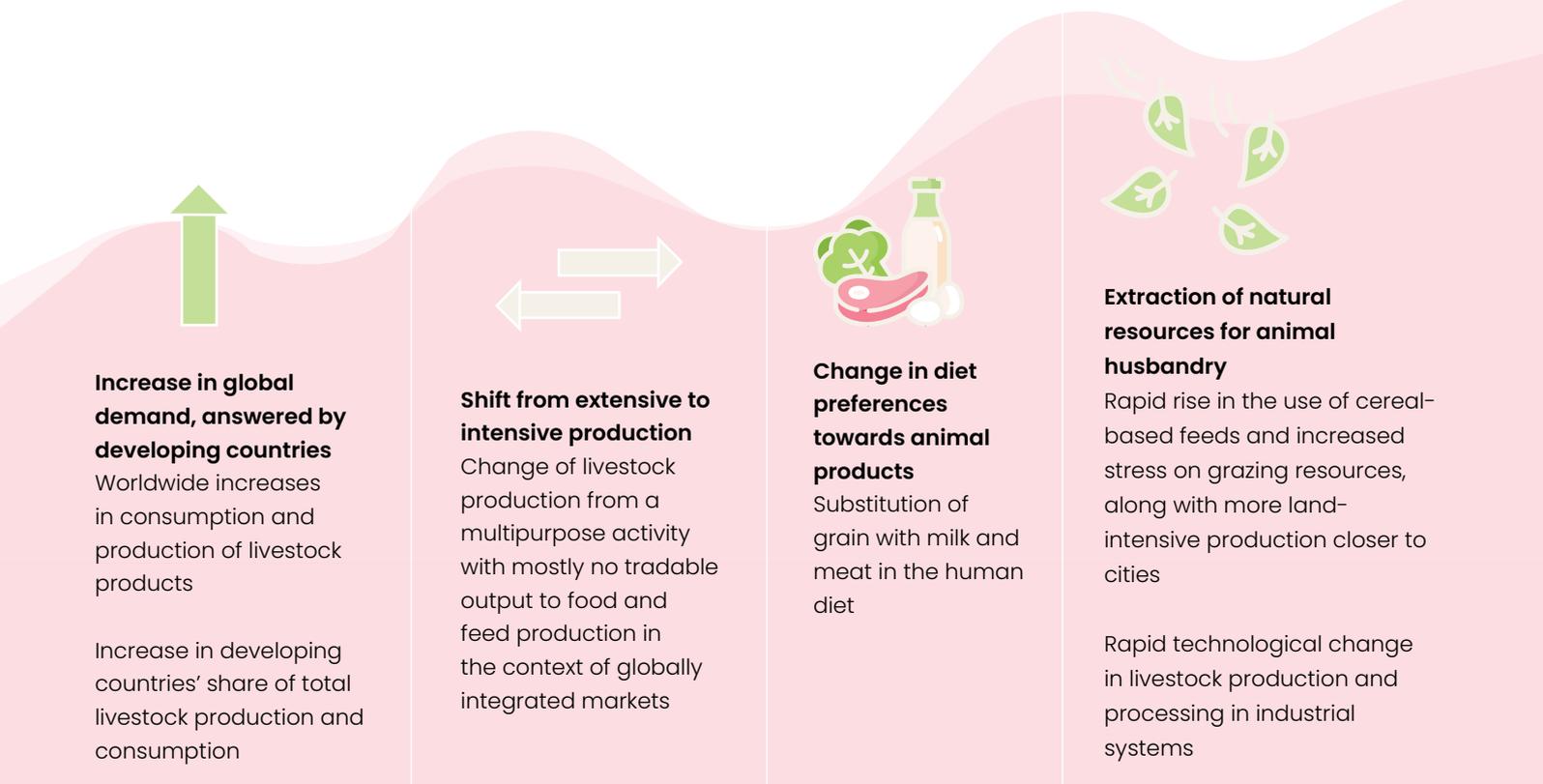
Farmed animals, commonly referred to as "livestock" are domesticated terrestrial animals that are raised to provide a diverse array of goods such as meat, milk, eggs, hides, fibres and feathers.[1]

With their present annual count being approximately 4.3 billion, farmed animals represent a large proportion of animals in India and, therefore, a large proportion of animal welfare issues in the country.[2]

Historically in India, domesticating animals for human use used to be the mainstay of migrating and sedentary pastoralists, belonging to various ethnic groups scattered across the country. These communities maintained a relatively extensive, sustainable and spiritually connected approach to domesticating the animals, deploying practices like open grazing, natural breeding, and so on. Post 1970, India witnessed a significant surge in the demand, production, and consumption of animal products, paralleling trends in many developing countries.[3] In fact, like the Green Revolution, there were several animal agriculture revolutions too, like the White Revolution (1970-1996) for dairy farming, Red Revolution (1980s) for meat, and Silver Revolution (2000s) for eggs.[4]

Though the associated economic growth was significant, particularly in meat and dairy production, this surge also triggered a rise in industrial factory farming practices, characterised by the commodification, confinement, and intense suffering of billions of animals, hazardous environments for workers in those set ups, and widespread changes in India's dietary and ecological landscapes.

How large-scale surges in meat and dairy production led to a changing landscape

Increase in global demand, answered by developing countries
Worldwide increases in consumption and production of livestock products

Increase in developing countries' share of total livestock production and consumption

Shift from extensive to intensive production
Change of livestock production from a multipurpose activity with mostly no tradable output to food and feed production in the context of globally integrated markets

Change in diet preferences towards animal products
Substitution of grain with milk and meat in the human diet

Extraction of natural resources for animal husbandry
Rapid rise in the use of cereal-based feeds and increased stress on grazing resources, along with more land-intensive production closer to cities

Rapid technological change in livestock production and processing in industrial systems

✕ MYTH	✓ FACT
India is a predominantly vegetarian country	23%-37% of Indians are vegetarian, but these are inflated estimations given the social, cultural and political value placed on vegetarianism.[5]

Beyond meat and poultry too, most Indians - about 74% - regularly consume dairy by way of milk, ghee, butter, and other dairy products.[6] In addition to the scale of consumption, India globally leads in the production of dairy too: from producing around 60 million litres per day in 1977, it produced 580 million litres per day in 2022.[7]

> *The vast majority of Indian adults follow some restrictions on meat in their diet, including refraining from eating certain meats, not eating meat on certain days, or both. However, most Indians do not abstain from meat altogether — only 39% of Indian adults describe themselves as vegetarian.*

– Pew Research Centre[8]

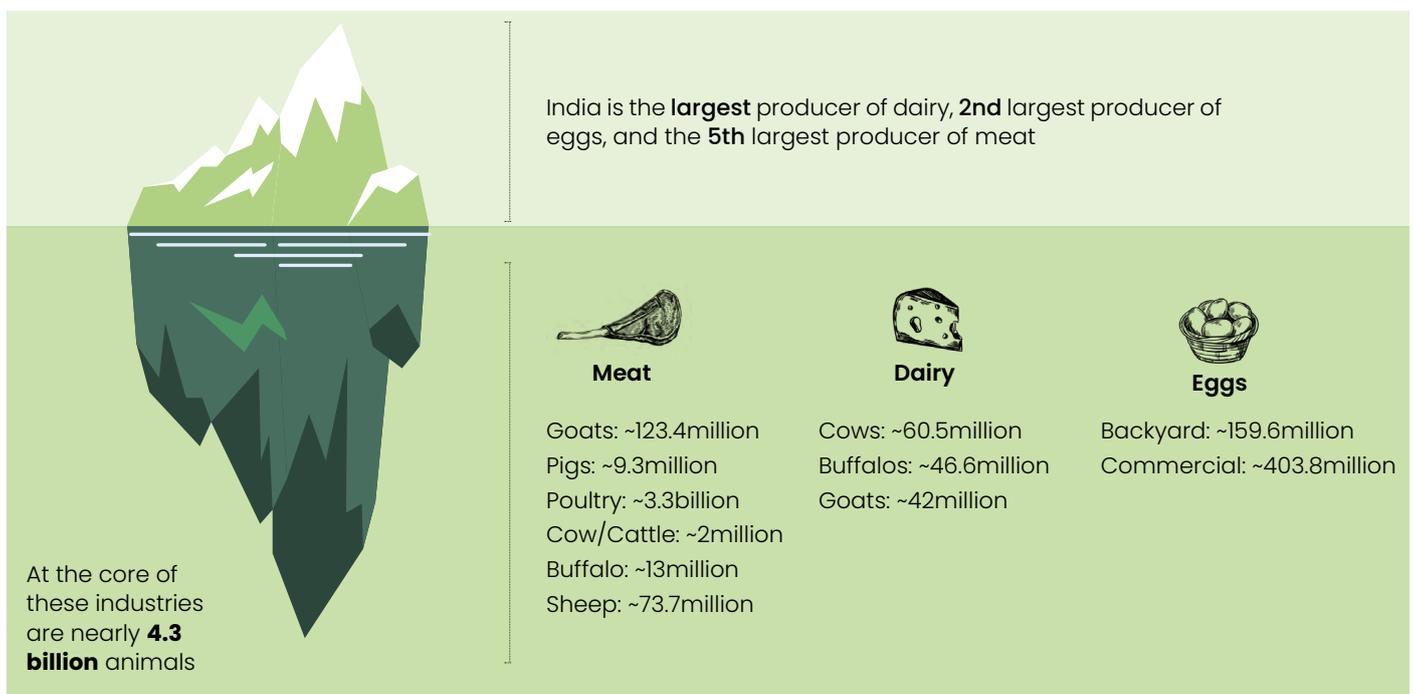**As the world's "dairy powerhouse" braces itself to become the world's top eggs and meat supplier too, it must contend with the most critical component of this machinery: its animals.[9]**

Sentience, i.e., the ability of animals to experience pain and pleasure, is recognised by law, religion and science across the world. As a member of the World Organisation for Animal Health (WOAH), India adheres to its Five Freedoms Framework as the welfare standard for its farmed animals. Through policy reform and landmark judgements like the Animal Welfare Board of India v. Nagaraja & Ors. Case, India's apex court has interpreted and applied WOAH's Terrestrial Animal Health Codes, specifically The Five Freedoms within Section 11 of the Prevention of Cruelty to Animals Act, 1960.[10]

Yet, when it comes to farmed animals - their economic value takes priority over their sentience. For instance, over 99% of India's eggs come from egg-laying hens confined in small cages, termed 'battery cages', where they cannot stand up straight, turn around, or spread their wings.[11] The space given to each is reportedly less than an A4 size sheet of paper.[12]

> *When we use the term "livestock", we automatically demote sentient beings to products — and that's where their invisibilisation begins.*

– Jayasimha Nuggehalli, Co-founder & COO of Global Food Partners

India is the **largest** producer of dairy, **2nd** largest producer of eggs, and the **5th** largest producer of meat

At the core of these industries are nearly **4.3 billion** animals

Meat
Goats: ~123.4million
Pigs: ~9.3million
Poultry: ~3.3billion
Cow/Cattle: ~2million
Buffalo: ~13million
Sheep: ~73.7million

Dairy
Cows: ~60.5million
Buffalos: ~46.6million
Goats: ~42million

Eggs
Backyard: ~159.6million
Commercial: ~403.8million

It should be noted that these numbers do not include male calves, spent cows or other economically "unproductive animals", treated as "byproducts" of the dairy industry. It also does not include fish (India is the world's 5th largest producer of fish).[14] Outside of rearing animals for food, India also leads in animal fibre production. With the 3rd largest sheep population in the world at 74.26 million sheep, India is the 9th largest wool producing country and brings in 1.6 billion USD annually from its sales. The leather industry in India accounts for around 13% of the world's leather production of hides/skins.[15]

Cooped up

How intensive systems inherently breed farm animal suffering

In India, factory farms are legally required to prevent unnecessary suffering for the animals and ensure that WOAH's Five Freedoms are adhered to. Although intensive confinement violates Indian law, the lack of clear, species-specific minimum space requirements contributes to pervasive non-compliance. While regulations relating to transport and slaughter are both species-specific and comprehensive, they are routinely circumvented on the ground.

For example, it is well-known amongst animal welfare practitioners that the lifecycle of a dairy cow generally begins at a dairy farm and ends in a slaughterhouse. In and between both locations, they suffer immense pain, injury and trauma.

> *It is during transportation that the 'white' cow of the legal dairy economy is first blurred into grey as she is transitioned into the 'black' end of the production line... Once an ex-dairy animal is sold by their farmer, and enters a market as a slaughter resource, it is rarely the case that they will go through only one transaction in one market. Permissions are often required from animal husbandry and revenue departments to transport bovines outside of the state. Most states also prohibit cow slaughter. To circumvent these restrictions, the bovines are made to enter and exit several markets across several state borders in unregulated, often heinous conditions with no clear purpose of sale, until their point of origin and destination become untraceable.*

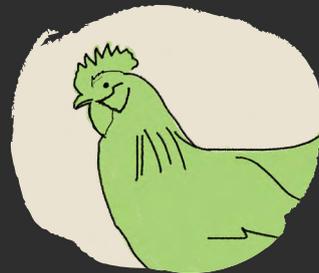-Yamini Narayanan, Jugaad and informality as drivers of India's cow slaughter economy (2019)[16]

Figure 3: The Farmed Animals Industry and the Five Freedoms Framework
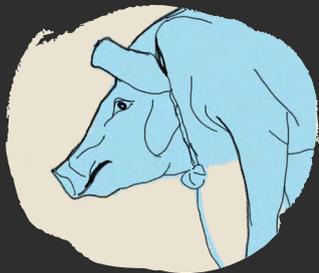
	Meat Industry	Dairy Industry	Poultry Industry
Freedom from Hunger and Thirst	Animals in factory farms are often deprived of any food and water for long durations that sometimes span across days while being transported.[17]	A 2019 study carried out on dairy farms in India by the Federation of Indian Animal Protection Organisations (FIAPO) found that 58% of the farms fed the animals less than half the minimum feed prescribed per day.[18]	There is no regulation that standardizes poultry feed, which leads to rampant use of antibiotics in feed.[19] In producing unnaturally high numbers of eggs, hens in intensive systems are not provided adequate nutrition that can help their bodies to sustain that level of production. As a result, they are likely to become severely emaciated.[20]
Freedom from Discomfort	Trucks in which animals are transported are often packed beyond capacity and non-compliant with transport rules and standards. During this time, the animals suffer serious injuries. Suffocation, heat and darkness characterise their transfer from point A to point B. Animals are often tied up in ways that discourage any movement. This leads to grave discomfort, injury, and even death.[21]	According to FIAPO's study, 1 in 3 dairies had no lighting.[22] Approximately 4 out of 5 dairies did not provide their cattle with access to any soft ground even though hard floors cause injury and bruises to cattle. 1 in 4 dairies had no proper or fixed shelter for the animals.[23]	Over 99% of the eggs produced in India are produced in caged systems.[24] These hens are reared in small, barren wire cages called battery cages.[25] Each hen in a battery cage has about 450 squarecentimetre2 of space – less than an A4 size sheet of paper in which she spends her entire life, unable to spread her wings or stand up straight.[26]

|	**Meat Industry**	**Dairy Industry**	**Poultry Industry**
Freedom from Pain, Injury Disease	Despite stunning being mandatory under Indian law, animals in India usually never get stunned before slaughter.[27] While slaughter itself involves pain, the animals also suffer during the rearing process. Broiler chickens raised for meat, having an approximate lifespan of 60 days, will spend 36–43 days in pain from confinement and intensive rearing practices - ranging from annoying to excruciating.[28]	FIAPO's study further found that 59% of dairies were found to have animals suffering from illness and injury. 56% of dairy farmers allow milking of sick animals. 47% of dairy farms used illegal oxytocin which is strictly prohibited under s.12 of the PCA, 1960.[29] In 25% of the studied dairies, male calves died within the first month.[30] The beef industry in India is directly tied to the dairy industry. Prohibition on cattle slaughter without a corresponding reduction in dairy production leads to a lot of unnecessarily cruel slaughter or abandonment of spent animals which results in a slower but still painful death.[31]	A study analysing the impact of battery cages found that in a timespan of approximately two years for a hen in a battery cage or 730 days, the average hen spends approximately 700 of those days in pain ranging from annoying to excruciating.[32] Male chicks are considered unproductive and unprofitable and are usually eliminated.[33]
Freedom to express natural behaviours	Cows, being social animals, require sufficient space for movement and companionship. A supportive environment that allows natural behaviours like grazing and resting is essential. Access to shaded areas ensures protection from harsh conditions, promoting their overall well-being. Animals in the slaughter industry are reared in very small spaces that do not allow for natural behaviours.[34]	Cows and other cattle in dairies also face extreme restrictions on movement. A study of Indian Daries found that 79% of dairies in India continuously tether of cattle with short ropes and 60.3 % of dairies tie the hind legs of the animals as well which further restricts movement making it difficult for them walk, turn or sit comfortably.[35]	Hens naturally roost at night, seeking elevated perches for sleep. As social animals, they thrive in flocks, establishing a pecking order through important social interactions. hens benefit from free-range foraging, where access to open spaces allows them to roam, scratch, and peck at the ground, promoting both physical and mental well-being. As these birds are raised in battery cages, which are cramped, barren and made of metal wire, hens cannot carry out any of their natural behaviours including dustbathing, perching, and nesting.[36]
Freedom from Fear and Distress	Slaughtering of animals has been done in the sight of live animals. Animals are also slaughtered without stunning in contravention to both animal welfare and food safety laws.[37]	Cows are extremely social animals and very attached to their calves. In 24% of the dairies, calves are separated from their mother at birth causing immense distress to both the calf and the mother.[38]	Hens in battery cages are frustrated and often exhibit signs of distress like feather pecking or cannibalism. Currently this is addressed by debeaking or restricting light in the farms which further reduce animal welfare instead.[39]
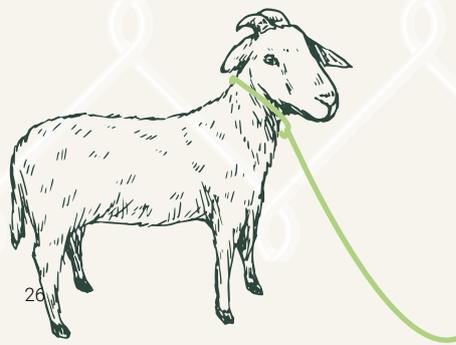
Building the capacity to be compassionate: Though animal cruelty becomes associated with the communities closest to the animal - often marginalised groups - it is strongly influenced by micro and macro-economic factors at national and global levels.

Voices from the field

"

I agree what we did was not good. I have been doing this trade since I was 16 years old. I am 40 now. I have myself picked up and flung thousands of animals into trucks... I have seen my uncles do it, my father do it, it is what we did. When they [activists] took photos and put it on Facebook and the newspaper, I literally covered my face in shame like this [he pulled a towel over his head as he spoke]. They made us 'see' things differently. We don't tie so tight now, don't put so many animals in. And you can see how thickly we have laid the hay [pointing to the truck floors]. I would really like to give up this trade, it is nothing but stress now but what can we do? We have no other skills, no education! You tell us what we can do! We are becoming poorer every day. Today I will leave this if you can get me a job.

- Interview by Yamini Narayanan featured in Jugaad and informality as drivers of India's cow slaughter economy (2019)[40]

"

Even though we had amazing customer response, it was very few customers. When I started "Eat With Better", my north star was animal welfare. I wanted people to stop eating meat by giving them a better substitute – jackfruit. But the truth is: the number of people who actively made purchasing decisions based on animal welfare were far fewer than you would think. Empathy-based consumerism and preference change is what needs to be done at scale.

- Karan Bajaj, Founder, Eat With Better
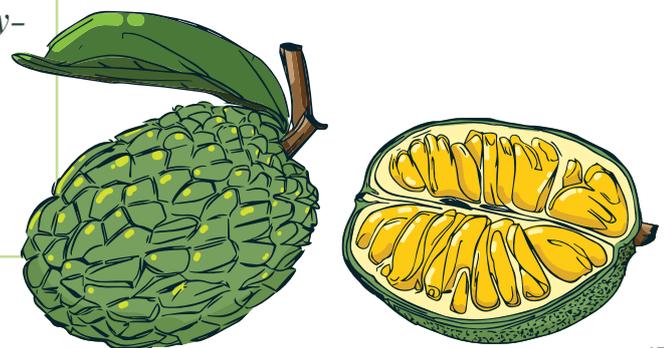
While farmed animal use in India is complex socially, politically and economically, it is certain that the level of cruelty and suffering for farmed animals can be mitigated – and that this is in the best human interest too. Intensive production and farm animal suffering show significant cascades into human communities and the ecology making it imperative for us to shift to more sustainable forms of animal agriculture.

> *Amidst farmed animals, we often overlook the profound ripple effect on farmers and labourers—the toll on their health, the well-being of their children, the very fabric of the communities near the farm. In this oversight, we fail to recognize the faces of those who are being marginalized further.*
>
> – Alokparna Sengupta, Managing Director, Humane Society International

> *Having interacted with many animal agriculture farmers, you could really see the problems with livelihoods, and there's no clear answers for us to go and say, this poultry farm should be shut down or this aquaculture farm needs to be shut down, and so on. They are very complex problems - food systems, animal agriculture, and all such intersection issues, it's not like you can just give one solution and everything's fine. There are a lot of inter linkages.*
>
> – Varda Mehrotra, Co-founder, Samayu

> *Animals and human welfare is the same.*
>
> *Indian people live so close to animals so there's a lot of mixing...not like in Western countries where animals are not living in proximity...even when we go to work, we meet so many animals on the road including dogs, cats, buffaloes, so there is a lot of interaction between humans and animals. Because of that, there is a lot of linking between human and animal welfare.*
>
> *If animals are healthy and happy, humans will benefit. Promoting animal welfare means humans also gain welfare. One health - the health of animals and health of humans is interlinked... we need to improve animal health to improve human health, as many diseases are zoonotic. Also, improving the health of animals reduces the cost of treating ourselves.*
>
> –Excerpts from interviews with livestock farmers from India, The Benefits of Improving Animal Welfare (2019):[41]

Cascading Effects

How does animal suffering in intensive systems cascade into human and environmental challenges?

Public Health

Increase in antibiotic resistance among human communities

Intensive confinement is a major contributor to antibiotic resistance, particularly in developing countries.[42] A study on antibiotic resistance in eggs in India in 2017 found that over 53% of the samples showed resistance to multiple antibiotics, some of which are critically important medicines according to the WHO.[43]

India is also the world's 4th largest user of antimicrobials in animal feed, residues of which have been reported from food animal products like chicken, meat and milk. At its present pace, India is expected to contribute to the largest relative increase in the world in antimicrobial consumption, through use in livestock between 2010 and 2030[44]. It is estimated that by 2050, drug-resistant diseases could cause up to 10 million deaths annually and cause damage to the economy as catastrophic as the 2008-2009 global financial crisis if this issue remains unaddressed.[45]

Spread of zoonotic diseases

Intensive animal agriculture has also been consistently linked with increased incidences of food-borne illnesses and zoonotic diseases[46], so much so that the United Nations in their report titled, "Preventing the Next Pandemic" identifies increasing demand for animal protein as a key driver of pandemics.[47] Approximately 60% of known infectious diseases and up to 75% of emerging infectious diseases are zoonotic or animal in origin. Each year, zoonoses are responsible for 2.5 billion cases of human illness and 2.7 million human deaths worldwide.[48]

Driven by global demand for cheap animal foods, the industrialisation of animal production has resulted in a focus on fewer and more genetically similar productive livestock breeds. The transition from subsistence and extensive to more commercial and intensive factory farming systems has resulted in the greatest zoonotic spill overs, because of higher livestock stocking densities, poor hygiene, lower animal welfare standards, and genetically similar breeds with less resilience to disease.[49]

Moreover, a study on battery caged poultry farms in India revealed high nitrate, sulphate, and TDS levels in groundwater, posing health risks such as cancer, adverse pregnancies, and methemoglobinemia in children due to prolonged nitrate exposure.[50]

Impact on under-resourced communities

It is also important to recognise that in public health crises like pandemics, the most marginalized and economically disadvantaged populations are affected the worst.[51]

Nutrition and Health

The purported benefits of animal sourced products in diets do not reflect the latest research in science. Consumption of animal products has been linked to an increase in the risk for cardiovascular disease, cancer, diabetes, obesity, and other disorders. Individuals that derive a large part of their nutritional needs from plant-based sources experience positive impacts on their health.[52]

Mental Health

Unfortunately, even witnessing animal abuse causes trauma to children that results in anti-social behaviours or other psychological disorders like depression and anxiety.[53]

Climate Change

Rise in Global Greenhouse Gas Emissions

60% of greenhouse gas emissions (GHGE) from global food production (responsible for 35% of all GHGE) come from animal source food production.[54] The Food and Agriculture Organization (FAO) estimates that industrialised animal agriculture alone is responsible for about 14.5%[55]–16.5%[56] of global GHGE. Various factors such as flock size, weight of animal, diet, manure management practices and topography influence GHG emissions from this sub-sector.[57]

Decline in biodiversity

Biodiversity is declining faster than at any time in human history, a trend accelerated by the global food system, primarily through habitat loss caused by the expansion of agriculture for livestock and crop production.[58]

The World Wildlife Fund's Living Planet Report 2020, reveals a staggering decline in the populations of mammals, birds, fish, amphibians, and reptiles since 1970, linking it to animal agriculture.[59]

Moreover, as livestock population densities increase, more natural habitats are converted into farmland (for grazing or animal feed), which in turn reduces biodiversity and, thus, the ability of ecosystems to provide crucial functions, such as disease regulation or dilution.

Loss and pollution of natural resources

Animal agriculture occupies 77% of global agricultural land, and uses about 1/3 of the world's fresh water,[60] yet it provides only 18% of the world's caloric supply, and 37% of the total protein supply.[61] India, with a Global Hunger Index rank of 107 (considered serious), has the world's highest child wasting rate, at 19.3%.[62] To meet the nutritional needs of India's growing population in the limited land available, it is imperative that we redesign our food systems to be more sustainable and equitable.

On the other hand, industrial animal agriculture units in the dairy and egg industry are responsible for the release of toxic wastes in the air, water and soil – affecting workers and communities living closest to these areas.[63] Slaughterhouses are considered part of a "red" category in the Central Pollution Control Board classification of polluting industries. In many areas, it is a major source of pollution of both groundwater and surface water. Additionally, the disposal of biological waste poses additional risks to the environment and public health.[64]

A study by the New Delhi-based NGO Centre for Environment Education reported that of a total of 297 tons per day (TPD) of slaughterhouse waste was generated every day in Delhi, 223 TPD is from illegal slaughterhouses. The waste is not accounted for and get disposed in nearby by lanes and low-lying areas, choking sewer lines and spreading infection.[65]

Water security

Factory farms use significant amounts of freshwater to raise, feed, and slaughter animals - so much of it that animal agriculture accounts for almost a third of the water used in global agriculture, which becomes even more concerning for India, as it faces its most acute water crisis yet, affecting an estimated 600 million citizens.[66]

Labour Welfare

Worker vulnerability

In intensive systems, both the animals and the workers endure inhumane conditions. Workers do not typically have hazard safety work gear and are often barefoot.

Due to their unorganised and disenfranchised status, they cannot protect against repeated exposure to irritants, pollutants, or medical care, despite being in a sector with a high incidence of occupational injuries and illnesses.[67] Reduced air quality within intensive poultry facilities also affect workers; the excessive irritation in the airways resulting from airborne pollutants can lead to tissue damage and scarring in the respiratory tract.[68]

Notably, workers in formal and informal slaughterhouses belong to minorities and marginalised communities – all issues are further exacerbated for them.

Lingering trauma

Workers in slaughterhouses frequently suffer from post-traumatic stress disorder, anxiety, and depression as a direct consequence of their work.[69] Despite consistently jeopardising the mental health of their workers, the animal agriculture industry lacks any measures to support their mental wellbeing, especially in India.

On the other hand, studies on labour welfare in cage-free and higher welfare production systems have shown psychological benefits and mood improvements in the farmers themselves.[70]

Use of child labour

The use of children for labour in the animal agricultural sector is rampant.[71] The International Labour Organization ranks agriculture as the second most hazardous occupation worldwide. In India, it is estimated that over 60% of children work in the agricultural sector, including animal agriculture.[72]

Though children are prohibited from working in slaughterhouses under the Child Labour (Prohibition & Regulation) Act, 1986, many slaughterhouses operate without registrations, licenses, and regular monitoring, these rules are challenging to enforce, and child labour is common.[73]

According to the United States Department of Labor, cattle products are among the goods most produced with child or forced labour. In their 2011 List of Goods Produced by Child Labor or Forced Labor, India was identified as a country where cattle products were produced using child labour.[74] There have also been reports of child labourers being rescued from dairy farms across India.[75] It is imperative that steps are taken to end child labour in animal agriculture in India.

With 20.5 million workers employed in this industry in India, it is important to consider the effects on individuals in these industries alongside other labour welfare concerns.[76] In crafting a more equitable and sustainable food system, it is paramount to position these workers as key stakeholders, thereby ensuring their seamless integration into a new framework that champions the principles of sustainable development and social equity.

Success Stories

How multiple stakeholders are coming together to sustain the shift from intensive to extensive methods of production, and address animal welfare in conjunction with livelihoods, health, and environmental benefits.

Though these issues seem overwhelming, each of them can be mitigated through enhanced animal welfare mechanisms, including incremental steps for each stakeholder group.

> *In our journey for an alternative protein roadmap, we didn't try to mirror a global playbook but focused on crafting one tailored for India. Unlike markets where premium prices might be accepted for ethical choices, India is price-sensitive. So, affordability became our mantra. We aimed for a price point lower than chicken, making our products accessible to the masses. Additionally, considering the broken state of frozen logistics in India, we prioritized developing shelf-stable solutions. This allowed us to penetrate even rural areas effectively. Leveraging India's abundant agricultural resources, coupled with lower capital and operational expenses compared to the West, we saw an opportunity not just for domestic success but also for competitiveness in the global market. Our approach differs from Western counterparts, offering a unique opportunity to carve a distinct identity rooted in Indian ingenuity and affordability.*

–Abhishek Sinha, Chief Executive Officer, Good Dot

Promoting animal welfare in corporate value chains | The Bharat Initiative for Accountability

A 2017 study on intensive poultry farms in India, conducted by the Council of Scientific and Industrial Research – National Environmental Engineering Research Institute, revealed ground water contamination, elevated levels of nitrate, sulphate, and Total Dissolved Solids associated with these facilities. It also showed that in contrast to intensive poultry farms, odour and housefly infestation in cage-free farms were less, and the welfare of the animals was greatly improved.[77]

In response to these findings, eleven Indian animal welfare organisations, including People for Animals and Compassion Unlimited Plus Action, formed "The Bharat Initiative for Accountability." The Bharat Initiative for Accountability is a national-level coalition for corporate accountability for animal welfare. Their focus is on raising awareness about battery cages and pushing for the adoption of cage-free alternatives in corporate value chains. Their goal is to objectively promote transparency and accountability in procurement, fostering a constructive environment for sustainable and ethical practices.

Building an alternative proteins roadmap for India | GFI India

India's agricultural and food systems are facing a significant transformation propelled by the need for sustainable alternatives to conventional animal-based protein sources. With over 80% of chicken meat sourced from factory farms and mounting concerns over environmental degradation and public health risks, there is a growing imperative to explore innovative solutions. GFI India recognizes the potential of smart proteins—plant-based, cultivated, and fermentation-derived options—to address these challenges and revolutionise India's protein landscape.

Plant-based proteins

India's agricultural richness presents an opportunity for leveraging plant-based proteins. Shifting focus towards crops like pulses, legumes, and millets can enhance sustainability and address nutritional gaps. By incentivizing farmers to adopt these crops, policymakers can drive sustainable agriculture while boosting farmer incomes.

Cultivated meat

Cultivated meat offers a solution to environmental and health concerns associated with traditional meat production, with its potential to drastically reduce land and water usage. Leveraging India's biomanufacturing expertise can position the country as a leader in this field.

Fermentation-derived proteins

India's extensive expertise in bio-pharma and biomanufacturing provides a unique advantage in the production of fermentation-derived proteins. By retrofitting existing infrastructure, India can capitalise on cost-saving opportunities and bolster its position in the global smart protein market.

India's diverse dietary preferences present challenges and opportunities for the alternative protein sector. The country's flexitarian approach, influenced by tradition, religion, and regional variations, necessitates tailored solutions to accommodate cultural sensitivities. However, with a growing young population increasingly concerned about health and sustainability, there's a significant market for smart proteins. While consumer acceptance is on the rise, widespread adoption hinges on factors like affordability, innovation, and supportive regulations.

To unlock India's full smart protein potential, private investment, government support, and regulatory reform are essential to address environmental and health concerns and ensure a smooth transition towards sustainable protein sources.

Government Support Through Policies
- Supply-side interventions: The government can encourage the production of smart protein ingredients by providing subsidies and incentives for farmers transitioning to climate-smart crops like pulses, legumes, and millets. Like the promotion of renewable energy sources, policies such as minimum support prices (MSPs) for smart protein crops and research grants for agricultural innovation can stimulate supply chain development and enhance domestic production capacity.
- Demand-side interventions: To stimulate consumer demand for smart proteins, the government can implement measures such as tax incentives, labelling regulations, and public procurement policies favouring sustainable alternatives. Additionally, public awareness campaigns highlighting the health, environmental, and ethical benefits of smart proteins can help shift consumer preferences and normalise their consumption.

Corporate Investment in the Smart Protein Sector
Corporate India plays a pivotal role in driving innovation and investment in the smart protein sector. Companies can invest in research and development to improve production efficiency, develop novel ingredients, and expand product offerings tailored to Indian tastes and preferences. Collaborations between food-tech startups, agribusinesses, and research institutions can facilitate knowledge exchange and technology transfer

Transitioning to more extensive and natural agriculture practices | Centre for Pastoralism

The Centre for Pastoralism (CfP) is dedicated to promoting the rights and livelihoods of pastoral communities in India, focusing on their indigenous, extensive, and mobile animal agriculture systems in contrast to intensive industrialised farming. With 40% of India's domesticated breeds managed in pastoral systems, CfP aims to address the decline of these systems due to diminishing livelihood opportunities and grazing lands, which also threatens India's animal diversity. Through research, advocacy, and collaboration with various stakeholders, CfP emphasises the importance of forage access, livelihood security, and extensive farming methods for pastoralists.

How CfP is reviving indigenous welfare practices

- **Enabling extensive and seasonally mobile herding:** CfP is actively reviving indigenous welfare practices by supporting pastoral communities in reclaiming traditional grazing lands through the Forest Rights Act (2006). By enabling pastoralists to maintain extensive and mobile herding practices, CfP facilitates natural feeding, breeding, and social behaviours for animals.

- **Documenting indigenous knowledge systems:** CfP's research unit seeks to consolidate knowledge on pastoralism's intersections with biodiversity, sustainability, and livelihoods. Their efforts include documenting herding practices nationwide, quantifying the pastoralist economy, and recording traditional uses of biodiversity.

Impact

Landscape Restoration	Enhanced Immunity and Well-being	Community Resilience
Communities have more assured access to forage via 29 Community Forest Rights (CFR) titles that have been issued following CfP and its partners' efforts; 30 sq km of the Banni landscape in Kutch have been restored through community efforts.	The intervention led to animals developing robust immunity and enhanced capabilities, fostering their overall well-being. Natural breeding practices also nurtured social bonds within herds, reducing stress levels and positively impacting milk and meat production.	Through market linkages, CfP's approach has bolstered the resilience of pastoral communities, helping them maintain their traditional way of life.

Key Takeaway

By focusing on natural processes and community-driven solutions, CfP demonstrated the potential for extensive and sustainable animal welfare practices

Improving animal welfare and public health outcomes through collaboration | India Animal Fund and Physicians Association for Nutrition

In India, there has been a concerning surge in chronic conditions, often termed as "lifestyle diseases," which account for a staggering 20% of premature deaths. Research has highlighted poor dietary habits as a significant driver behind this trend. However, promisingly, studies indicate that adopting plant-based diets can offer substantial mitigation and even reversal of numerous chronic ailments, offering a beacon of hope in the battle against these pervasive health challenges.

The India Animal Fund (IAF) initiated an intervention to combat the crisis of lifestyle diseases in the country by helping start the India Chapter of Physicians Association for Nutrition. Recognizing the lack of emphasis on nutritional approaches and the dearth of training in whole-food-plant-based diets within the medical community, PAN conducts Continuous Medical Education (CME) seminars at medical institutions like colleges and hospitals. Collaborating with over 5000 physicians, medical students, and healthcare professionals, IAF facilitated workshops and seminars aimed at enlightening participants about the role of nutrition in disease prevention and management. By leveraging evidence and research, the intervention empowered the medical fraternity with the knowledge and tools necessary to advocate for whole-food-plant-based nutrition as a sustainable solution to combat lifestyle diseases. Through this initiative, PAN and IAF aim to foster a shift in healthcare practices, ultimately leading to improved public health outcomes, while also facilitating a reduced demand for animal sourced foods.

A recommendation
Equitable food for thought
Rethinking mid-day meals in India

Equitable consumption emphasises fair distribution of resources and considers the needs of all individuals, particularly regarding food consumption. In the context of the mid-day meals scheme in India, equitable consumption would mean that individuals consuming high quantities of animal sourced foods would reduce their intake and supplement it with plant-based foods or alternative proteins. It would not require those consuming small quantities or those suffering from poverty and malnutrition to further cut down on their consumption. This involves acknowledging disparities in access to food and addressing them through thoughtful policies and practices.

To achieve equitable consumption within the mid-day meals scheme

1. Improving sourcing practices: Source eggs from backyard farms that prioritize animal welfare and sustainable practices. This supports local economies, reduces environmental footprint, and ensures higher quality food for children.

2. Community empowerment: Align sourcing practices with government policies to empower women in local communities. By involving them in egg production and distribution, economic opportunities are created, contributing to their empowerment and economic security.

3. Enhancing nutritional quality: Prioritize the nutritional quality of mid-day meals by sourcing fresh, locally produced ingredients. This ensures that children receive adequate nutrition for their development, regardless of socioeconomic status.

By implementing these steps, the mid-day meals scheme in India can not only promote equitable consumption but also contribute to broader goals of sustainability, health, social justice, and animal welfare.

The Way forward

A roadmap for farmed animal welfare in India

Ethical Production

Promoting high-welfare farming practices allows animals to live free from unnecessary pain, fear, and injury and exhibit natural behaviour, while also enhancing human welfare.

1 Ensuring compliance
The governments and its local partner agencies must implement existing animal protection laws, environmental laws, food safety laws and labour laws on the ground. Moreover, they must develop a holistic roadmap to solve for the issues of illegal factory farms and their workforce

2 Developing a positive regulatory landscape
It is important to formulate regulations, standards, and welfare frameworks that provide specie specific standards for farmed animals in India and promote a favourable environment for the development of alternative proteins

3 Upskilling producer groups
The government must invest in regular capacity building and upskilling for farmers across India on basic animal welfare and food safety practices

4 Incentivising higher welfare production systems
The government must build producer group capacities to adopt higher welfare systems, and incentivise them to do so

5 Adopting sustainable sourcing strategies
Corporate stakeholders must uphold practices, policies, and partnerships which foster farm animal welfare as an integral part of their business strategy

6 Ending intensive confinement practices
It is imperative to ban intensive farming practices like the use of battery cages and corresponding practices like adding of antibiotics to the feed

Equitable Consumption

Equitable food systems ensure that all people canaccess healthy and affordable food. It addresses structural issues in the food system that disproportionately affect low-income individuals, minorities, and those living in geographically adverse areas. Equitable consumption involves supporting local economies, ensuring fair wages and safe working conditions for food workers, and promoting sustainable agricultural practices that benefit both the environment and the community.

Investing in alternative proteins research and development
It is critical to support knowledge and capacity building in the alternative protein space, with a special focus on access, affordability, livelihood security, and nutritional challenges in India

Reducing dependence on Animal Sourced Foods (ASF)
Individuals consuming high quantities of ASF should strive to reduce their consumption of ASF to the extent possible to ensure the demand for ASF is more sustainable.

Promoting plant-based protein: Government bodies can bring forth favourable regulations and policies, as well as schemes and other financial incentives to encourage innovation, growth and scalability in this sector.

Building an effective supply chain for alternative proteins and plant-based food: Corporates and other financial bodies can invest in companies creating alternative animal products and supporting industries to create a more favourable ecosystem for development of alternative proteins.

Examining the welfare of working Animals in India

Working animals have been inherent, yet invisible contributors to India's agriculture, construction, transport, tourism and entertainment sectors. Despite reduced dependence on them for labour presently, half a billion animals, including bovines, equids, camels and elephants, continue to substitute machine and motor work in under-resourced geographies in India.

1

Issues for animals

- **archaic management practices**
- **limited healthcare services**
- **occupation hazards and injuries**
- **physical abuse**
- **abandonment and trafficking**

How these issues cascade into their caregivers

Remoteness or lack of resources, poverty, zoonotic diseases, lack of access to appropriate healthcare, lack of alternative livelihoods.

These issues underscore the conditions and vulnerabilities that cause this dependence between humans and animals, which in turn cause suffering and lack of welfare for both.

2

3

Interventions spotlighted

- Providing a safe space to heal for over-worked and injured hill-station animals | **People for Animals (PFA), Uttarakhand**
- Building species-specific and accessible healthcare | **Help in Suffering**
- Elevating Equine Welfare Standards | **Brooke India**
- Putting An End to the 'Dancing Bear' Practice | **Wildlife SOS**

4

A roadmap for the enhanced welfare of working animals

The need of the hour is to support the work of these organizations by:

- **Establishing species-specific veterinary standards and accessible care**
- to address the need for improved health and welfare of working animals
- **Promoting and incentivizing sustainable alternatives and technology** that can replace animal use, while supporting the upliftment of under-resourced communities
- **Building awareness and knowledge** among owners about diseases and proper practices to manage care for their animals
- **Developing infrastructure, tools and implements** that enhance the comfort, welfare and wellbeing of working animals
- **Advocating for the Inclusion of working animals in policy and programmes** especially of donkeys, horses and mules in welfare policies
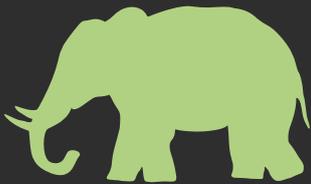
Working animals, commonly referred to as "draught animals", are domesticated terrestrial animals who have been trained to perform specific tasks; they include equines, bovines, canines, and captive wild animals.

Cumulatively, working animals account for over half a billion animals in India, often entirely substituting machine and motor work in under-resourced geographies.

India has between 65 to 70 million working bovines, over half a million working equids, and 252,000 working camels; it also has working elephants, for whom there is no official count.[1,2,3] Historically, working animals have shouldered key sectors in India's economic progress, supporting the mobilisation of resources, commodities, and communities. Earlier, the life of working animals in rural areas was relatively well integrated within their local landscapes, where village pastures, crop residues, and fodder were freely available.
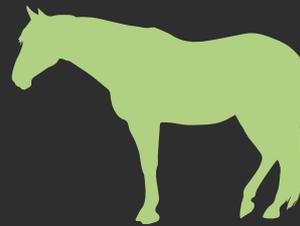
Makers of India
Working animals have walked alongside humans, literally carrying and building pieces of our shared heritage, through history.
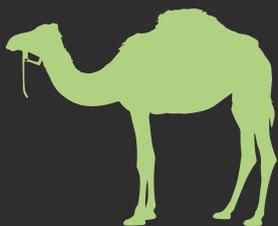
Countless horses, donkeys and mules carried

heavy stones

to hilltops in Maharashtra used to build the Maratha forts in the 17th century.[6]

1000

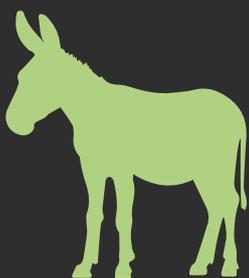elephants carried the heavy marble to Agra to build the Taj Mahal in 1632.[5]

India's historical battles were fought alongside armoured camels, spying squirrels, and mine sniffing hounds – today, the army has more than
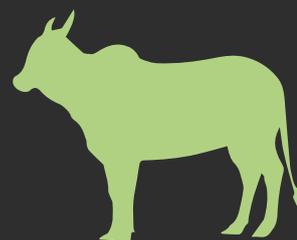
1000 dogs,

5000 mules,

& **1500** horses.[7,8]

Donkeys are still used by the Indian

Election Commission

to transport vote boxes to isolated locations that are inaccessible by car.[9]

In 2009, animals tilled about

65%
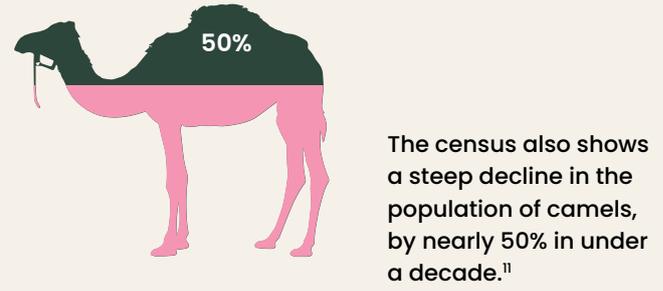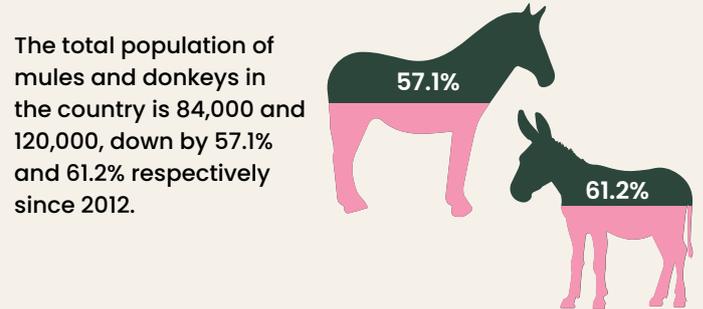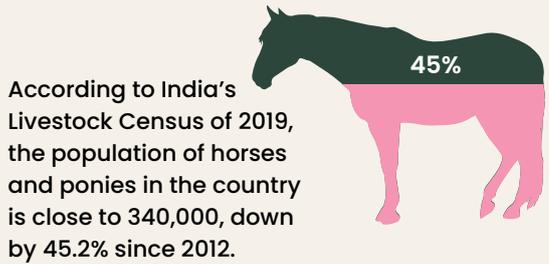
of India's cultivable soil and provided

60%

of the total power used in agriculture.[10]

> *They were promoted in pre-Independence India by princely states and temple trusts, which provided funds to develop specialised breeds as well as stud bulls for breed improvement in villages. Of India's 27 known cattle breeds, most were developed for draught in times the economy ran on animal power. Milk production wasn't the focus of cattle breeding, then.*

–Down To Earth (2004)[4]

In recent decades, however, dependence on working animals is reducing, and so are their numbers.

According to India's Livestock Census of 2019, the population of horses and ponies in the country is close to 340,000, down by 45.2% since 2012.

45%

The total population of mules and donkeys in the country is 84,000 and 120,000, down by 57.1% and 61.2% respectively since 2012.

57.1%

61.2%

25%

India has approximately 58,000 Himalayan Yaks – a drop of about 25% since 2012.

50%

The census also shows a steep decline in the population of camels, by nearly 50% in under a decade.[11]

Even though the reliance on working animals is decreasing due to an uptake in technology, the retired animals often find themselves sold to the meat industry, abandoned or smuggled across borders.[12] Moreover, for those animals that continue to work, life is characterised by low welfare, and for communities tending to them, life is characterised by economic insecurity.

> *Our attitude to working animals essentially comes from a point of law which regards animals as property. And what do you do when you have property? You use it. You use it to the fullest possible extent that you can, and that really governs the way that we look at working animals.*

–Bharati Ramachandran, Chief Executive Officer, Federation of Indian Animal Protection Organisations (FIAPO)[4]

Burned out

How intense working conditions affect the wellbeing of working animals

"Donkey work" is a phrase we use universally to denote drudgery, tedious and repetitive work, or the less interesting components of work that must be done. While languages around the world have phrases like this, each traces back to a hard life that working animals live out. The ground conditions for working animals in India are characterised by archaic care and management practices, strenuous work, hazardous environments, and lack of specialised and accessible health care. Though the Prevention of Cruelty to Draught and Pack Animal Rules (1965)[20] and Five Freedoms Framework[21] prescribe mandatory basic minimum welfare standards for working animals, in reality they are worked well beyond these limits.

Getting an animal to perform labour is premised on conditioning, training and compliance – which inherently requires some degree of coercion, and often leads to suffering.

Photo- The donkey sanctuary

Hard work and no play: a day in the life

Construction

Donkeys, Mules, Horses

Carrying out brick manufacturing at kilns, often serving as substitutes for cranes on-site, bearing loads of bricks, sand, and crushed stone for mortar, ascending 12 flights of stairs while carrying 25 bricks, each weighing 2.5kg.[13]

Agriculture & Forestry

Donkeys, Horses, Elephants, Bulls, Camels

Performing cultivation and tillage tasks, as well as ploughing, mowing hay, drilling grain and discing.[14,15]

Transport

Donkeys, horses and elephants, camels

Transporting goods, locals and tourists in hilly regions and non-motorable roads.[16]

Transporting resource-poor communities from one point to another in both rural and urban settings.[17]

Used for border patrol by para-military forces and for recreational joyrides, particularly in non-habitat states along beaches.[18]
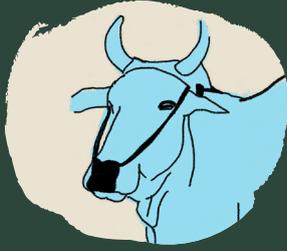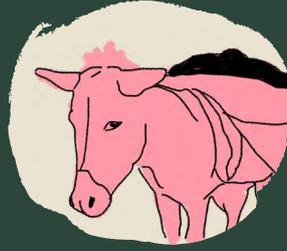
Culture & tourism

Horses, mules and elephants

Used in cultural rituals, like weddings and sports, to entertain, to transport people, "bless" people, and to pull carriages
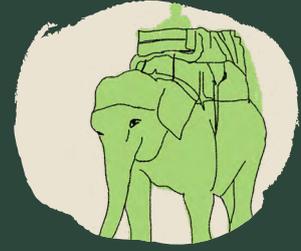
Figure 4: The Working Animals Industry and the Five Freedoms Framework

Working bovines

Working equines

Working camels & elephants

	Working bovines	Working equines	Working camels & elephants
Freedom from Hunger and Thirst	Working bullocks receive inadequate and unbalanced feeding, leading to malnourishment and weakness, especially during busy seasons. During the off-season, they are typically further underfed due to owners lacking resources for proper care. Lack of clean drinking water is also an issue in various parts.[22]	Equids are usually kept tethered while grazing and feeding, and this causes them tremendous discomfort and lesions. Application of hot iron for branding also causes painful lesions, leading to infections and lifelong distress for donkeys.[23]	A study in Tamil Nadu, India, evaluated captive elephant conditions. Private and Temple facilities provided less, and lower-quality food compared to Forest Department facilities. Privately kept elephants, especially those owned by keepers, received less food and heavier workloads. Temple elephants, despite moderate food supply, were often chained with minimal exercise.[24]
Freedom from Discomfort	Bullocks naturally have long, sharp horns, causing fear among owners due to which owners often carry whips to prevent butting. Bullocks are also tightly tied from both sides of the head with a nose rope, causing constant pain and discomfort.[25]	Lameness is prevalent among working donkeys, often caused by foreign objects lodging in the hoof due to walking on poor roads and irregular cleaning by owners. This can lead to infections and painful complications like hoof abscesses. Additionally, inflammation of tendons, ligaments, muscles, and joints can result from overloading and insufficient rest.[26]	Subjecting elephants to long periods of parading on hot tarred roads without rest, whether for religious or other purposes, poses welfare concerns. Additionally, transporting elephants in trucks of inadequate size or with uneven floors can result in severe jerks and discomfort for the animals. Moreover, the practice of transporting elephants in trucks for extended periods exceeding 12 hours without breaks further exacerbates their stress and welfare.[27]
Freedom from Pain, Injury Disease	Bullocks working in agricultural fields typically don't require shoeing. However, when used in sugar mills or market yards where they walk on metal roads, shoeing becomes necessary, causing injury and risk of fractures. Improper shoeing and trimming of hooves can lead to lameness and pain.[28]	Nostril slitting and ear tip cutting are common, rooted in lack of veterinary care accessibility.[33] It's believed to enhance air intake for improved work efficiency or treat tetanus and is often performed without anaesthesia. Ear Tip Cutting is done to drain "bad blood" in suspected cases of blood protozoan diseases, often by unqualified individuals without anaesthesia, risking tetanus due to non-sterile equipment.[34,35,36]	Camel noses may tear and become infected due to the use of long wooden nose pegs attached to ropes or reins. Constant friction from these pegs can damage the nasal septum, leading to infections and maggot infestation, worsening tissue damage.[38]

Working bovines	Working equines	Working camels & elephants
Bullocks used to haul sugarcane from fields to sugar mills in carts commonly develop swelling or abscesses on the neck due to overloading, especially if the pair of bullocks hitched to the cart are of unequal size or height. Yoke gall, a painful abscess, is common in working bullocks, who often must pull overloaded carts. Animals with neck abscesses are often not rested until recovery and are still expected to work, exacerbating their pain.[29] Procedures like castration of bulls are done without any anaesthesia in painful conditions.[30,31] Furthermore, several general welfare issues are relevant to working bullocks, including disbudding, dehorning, and horn tipping, tail docking, animal identification methods, and the prevalence of lameness.[32]	Donkeys or ponies equipped with pack saddles for transporting raw bricks in a brick kiln often develop wounds on body parts where the saddle makes contact. Friction from the crupper causes wounds under the base of the tail, while poorly maintained or ill-fitted saddles result in wounds on the withers and spine. Additionally, wounds on the girth and belly arise from the use of girth bands to secure the saddle and load. Overloading and overworking can also lead to lameness in these animals.[37]	Elephants are often tethered with heavy chains or hobbles containing spikes or barbed wires, causing deep wounds. This chaining also results in foot ailments such as nail cracks and thinning foot pads due to the hard concrete floor. Additionally, elephants develop abscesses on their shoulders and hindquarters from constantly lying on concrete, often taking years to heal. Moreover, the use of banned bull hooks by mahouts causes injuries and bleeding in elephants.[39]
Freedom to express natural behaviours		
Bullocks are accustomed to grazing alongside companions of their own species and engaging in social grooming activities. Being tightly tethered with a nose rope on both sides while resting and restricting their movement to the extent that they cannot even flick their head or tail to alleviate irritation from flies hampers their natural needs.[40]	Donkeys have a natural inclination to seek companionship within their own species. However, in the absence of other donkeys, they may form bonds with horses, mules, or other small livestock for social interaction. Where such conditions don't exist, equids can turn aggressive, fearful or dull.[41]	The intricate matriarchal social structures of elephants are disturbed in captivity. In captivity, healthy male elephants in musth, a state of heightened aggression, are often mistreated and viewed as rogue elephants. In a study on the conditions of privately owned captive elephants in India it was found that 35% of elephants were chained using spikes or were hobbled by their forelegs. The average duration for chaining per day was found to be 15.8hrs.[42] In many cases these elephants are deprived of the space and natural resources to perform their natural behaviours.[43]
Freedom from Fear and Distress		
The treatment of bulls in performances and events in India resulted in the landmark judgement of AWBI vs Nagaraja & Ors. In which the Supreme Court read the five freedoms into s.11 of the PCA and stated that the behaviour of these bulls in these events was a direct result of fear and distress induced by cruel handling practices.[44]	In a study about the treatment of pack animals in 2013, 88% of owners said they beat the animal to get it to perform their work.[45]	Elephants are also almost always subject to inhumane and painful methods of training that cause significant distress and fear.[46] Elephants used in temple and ceremonial activities had higher hormonal markers for stress.[47]

These issues underscore the conditions and vulnerabilities that cause this dependence between humans and animals.

In a survey by Brooke India on a sample of 200 equine owners, 47 stated that their donkeys were their sole source of income, earning a meagre INR 600 (under USD 7) per day in Delhi.[48] The global export industry has also added to their woes, with a 61% decline in donkey population from 2012 to 2019 due to the demand increase of donkey meat and skin.[49]

❝

The shared suffering of owners and their donkeys shows how vulnerable both populations are to exploitation.

–Tamlin L Watson et al, in Cultural "Blind Spots," Social Influence and the Welfare of Working Donkeys in Brick Kilns in Northern India[50]

Case Study 1 | Walking a mile in their hooves

The woes of equids and their keepers in a pedestrian-only hill station

Matheran is a hill station in Maharashtra, situated at 2,625 feet above sea level, and over 12 kilometres of forest. It's Asia's only automobile-free hill station, with its laterite-red winding roads bearing the footfall of half a million tourists annually, 94 hand-pulled rickshaws, and 500 equids (horses, ponies and donkeys) - who look after all transport needs on the hill. Local inhabitants from villages downhill depend on providing tourists horse rides around the hill station as a primary source of income. Matheran's equids live difficult lives, as do their human keepers. On the one hand are anxious, albeit trained, horses who are expected to be trusty modes of transport in an excitable tourist environment; on the other hand, are their horsemen, eager to earn their living in a tourist town where tourists have stopped coming.[51] Matheran's donkeys work completely behind the scenes. Away from the tourist spots are the donkey depots, small, terraced plots for donkeys to be parked in between chores. Here, tied to a pole, they munch out of a bag of fodder hung around their snouts before their next chore. From multiple gas cylinders to bags of concrete powder, they ferry essential supplies to the hill station.

Matheran's equids face considerable challenges:

Limited access to healthcare

Animal hospitals capable of treating equids and addressing work-related accidents are situated downhill, outside Matheran. Gelding camps may be routine, but access to timely medical care for the equids is lacking.

Injuries from infrastructure changes

In 2023, animal relief organisation Animal Rahat assessed the working conditions for horses and ponies in Matheran and found that over 75% of these animals were suffering from various leg and hoof problems, which ultimately lead to lameness. The transformation of Matheran's red laterite earth roads into paver blocks and asphalt has also led to laminitis, causing hoof inflammation, and separation of the hoof from the bone.[52]

Epidemics and financial hardships

Epidemics and financial challenges have further burdened Matheran's equids. In 2005, 16 horses succumbed to an epidemic, and in 2018, 95% contracted the Influenza A virus. The COVID-19 pandemic exacerbated their vulnerabilities, leaving horse riders and caretakers financially strained and reliant on donations to sustain their animals.[55]

Illegal practices

Unscrupulous practices involving the use of unlicensed horses, often bearing names and paperwork of deceased equids, contribute to the mistreatment and overloading of these animals.[56]

> *The paver blocks are extremely high risk. The horse is unable to stop, as the paver blocks are slippery. The numbers of deaths, injuries, and falls bear this out. When all evidence is before us, and the ordinary people can see what is happening, why are the authorities and the decision-makers silent and turning a blind eye to this problem?*
>
> –Vikas Arvind Ranjane, Secretary, Sthaanik Ashwapal Sangathana (local horsemen union)[53]

> *After afflicting more than 60% of the 18,000 ponies/horses in Jammu, the virus travelled to south via migration, sale and purchase of animals. It was detected simultaneously in Matheran and Pune. Some horses brought to Matheran from Nashik were carrying this virus.*
>
> –P. M. Bhosale, a veterinarian with the NGO In Defence of Animals[54]

> *In Matheran, where people live hand to mouth, a campaign focused on basic health of animals can make a significant impact. Despite their love for animals, the lack of resources and education leaves them unaware. By educating them about available resources and encouraging attendance at free clinics for animals, we can initiate positive change. Philanthropists can play a vital role by targeting specific small areas, like Matheran, investing in outreach programs that address immediate needs and foster a healthier community?*
>
> –Uttara Kennedy, Veterinarian at RSPCA Queensland
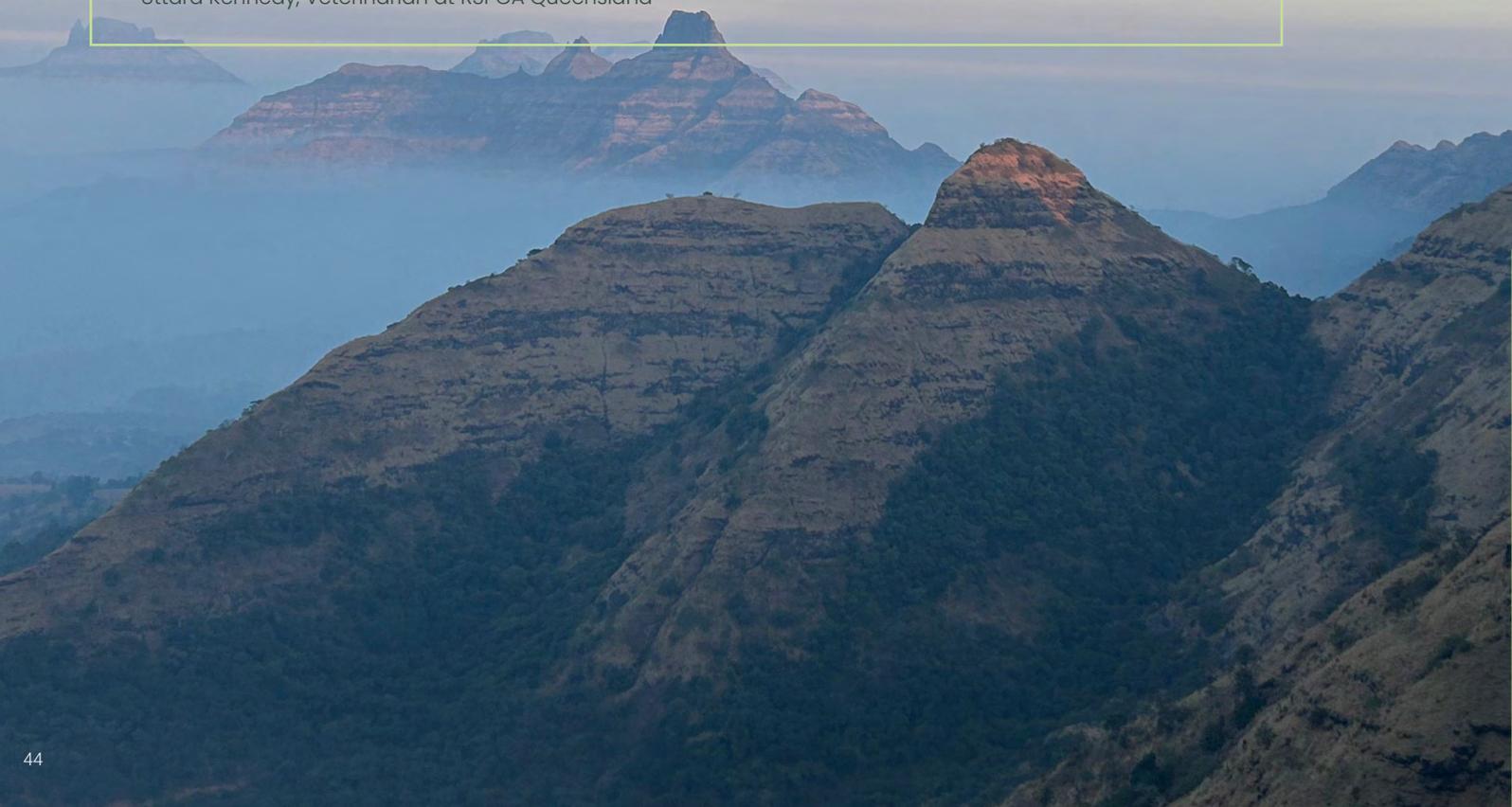
In many societies, working animals share intricate connections with the daily lives of their people, yet there exists a detachment when it comes to the centring of this reality in research and policy. Bearing this in mind can lead us to more sustainable solutions.

"

Working equine animals play diverse socioeconomic roles, helping to maintain and enhance all categories of capital assets contributing to a sustainable livelihood. Although animal owners, particularly women, are fully aware of this contribution, recognition of working animals declines to near-invisibility at higher levels of policy, research, funding and programmatic decision-making. We cannot expect them to be a central priority and concern to all people at all times, but we can insist that they are never completely forgotten?

–Dr Joy Pritchard, 7th International Colloquium on Working Equids, 2014

Cascading Effects

How does suffering of working animals cascade into human and environmental challenges?

Public Health

Infectious diseases

Glanders, an infectious equine disease, persists in parts of India, posing threats to both equines and their owners. The disease is zoonotic, emphasising the need for hygiene measures to prevent potential human cases.[57] The global impact of zoonotic diseases, responsible for a significant portion of human infections, is a critical concern.

Zoonotic diseases, those transmitted from animals to humans, constitute a staggering 61% of all human infections and account for 75% of emerging diseases[58]. According to the World Bank, these diseases are responsible for over 1 billion cases and 1 million deaths annually, underscoring the urgency of addressing and mitigating their impact on a global scale.[59]

Equity

Bridging the gap

Women rely on working equine animals for support in fulfilling their many roles within the household and the wider community. This includes helping with domestic drudgery, providing an income for women and their families, and enabling savings by providing transport for goods, water, firewood, animal feed, and other produce.[60]

Worldwide, an estimated two-thirds of poor livestock keepers - approximately 400 million people - are women.[61] The welfare of working animals ensures the consequent equity, security and well-being of women.

Livelihood security

Working equids serve as indispensable assets for rural families, supporting income generation in various sectors such as agriculture, construction, extractive industries, tourism, and transport. Their death or inability to work due to improper management and handling practices can have severe economic consequences on their owners especially in places where working equines are the primary source of livelihood, and each horse/mule supports a family of 6 – families largely below the poverty line.[62] Where animal use is replaced sensitively and appropriately, interventions have had a positive impact on the communities too.[63]

Safety

Occupational hazards

Equines confront accidents in the course of their work lives. Moreover, while searching for food, working animals are at risk of accidents, underscoring their vulnerability in meeting essential needs.[64,65]

Commercially unviable equines are often abandoned on the roads, subjecting them to an uncertain and challenging fate.[66]

Success Stories

Though these issues seem overwhelming, each of them can be mitigated through enhanced animal welfare mechanisms, including incremental steps for each stakeholder group.

Providing a safe space to heal for over-worked and injured hill-station animals | People for Animals (PFA), Uttarakhand

Happy Home Animal Sanctuary, managed by People for Animals (PFA) Uttarakhand, serves as a rehabilitation centre and safe space for rescued animals, particularly equines, goats, sheep, hens, and cats. Spanning 4000 square metres, and situated in Chharba, Dehradun, the sanctuary addresses the plight of abandoned, injured, or exploited animals, including those utilised on the challenging mountain tracks near Kedarnath.

Interventions

Comprehensive animal care: Happy Home Sanctuary offers a compassionate environment, free from ties and cages, promoting social interaction and freedom for its residents. It intervenes on behalf of diverse species facing adversity, rescuing animals from abandonment, injury, slaughter, or involvement in illegal activities. Additionally, satellite units, like infirmaries near the Kedarnath track, provide vital care and support for the equines employed in rigorous work conditions.

Collaborative Efforts: The sanctuary's operations thrive on collaboration with various stakeholders, including government bodies, private donors, and volunteers. Through collective action, animals are rescued, rehabilitated, and provided with ongoing care. By leveraging partnerships, Happy Home maximises its impact and extends its reach to ensure the welfare of animals across the region.

Impact

A no-tie, cage free haven: Happy Home Sanctuary's interventions have significantly improved the lives of animals under its care. The no-tie, cage-free environment fosters their physical and psychological well-being, allowing them to live without fear or suffering. Animals spared from exploitation and harm find solace and comfort at the sanctuary, experiencing improved living conditions and a renewed sense of safety.

Advancements in policy: The sanctuary's advocacy efforts have led to tangible policy changes in Uttarakhand. Welfare standards for working animals have been declared by the state government, aligning with national guidelines set by the Animal Welfare Board of India. Furthermore, the organisation actively works towards enforcing these standards on pilgrimage tracks, ensuring better treatment for animals in challenging environments.

Key takeaway

Happy Home Animal Sanctuary emphasises the transformative potential of collaborative action in animal welfare. Through its holistic approach and partnerships with stakeholders, it provides a lifeline for animals in distress, offering them a chance at a better life.

Building species-specific and accessible healthcare | Help in Suffering

Rajasthan, home to 65% of India's camel population, once relied heavily on these animals for livelihood. However, the shift towards mechanisation and the prevalence of technology-driven vehicles have reduced the demand for camels, impacting access to veterinary care. In response, Help in Suffering (HIS) launched the Camel Welfare Program in 2001, recognizing the significance of camels and aiming to address their health and safety concerns through a comprehensive intervention.

Interventions

On-Site Veterinary Care: HIS provides on-site veterinary care for various ailments during each visit to camel sites, ensuring prompt treatment and alleviation of suffering.

Reflectors installation: To prevent accidents during nighttime travel, HIS instals reflectors on camel carts, promoting safer transportation and reducing road mishaps.

Nose pegs distribution: Replacing wooden pegs, HIS distributes specially designed plastic nose pegs during every visit to minimise injuries and discomfort for camels, enhancing their well-being and comfort.

Deworming sessions: Quarterly deworming sessions are conducted to reduce worm load and enhance the overall health of camels, contributing to their improved well-being.

Training sessions: Monthly training sessions for camel owners raise awareness, knowledge, and skills to better care for their animals, promoting responsible ownership and compassionate treatment.

Rescue and rehabilitation centre: HIS established a dedicated Rescue and Rehabilitation Centre in Bassi for distressed camels, providing them with sanctuary, care, and necessary medical treatment.

Impact

Improved health: Veterinary treatment and regular deworming have led to noticeable improvements in the overall health of camels, with HIS deworming 2053 camels in 2021-2022.

Safer transportation: The installation of reflectors on camel carts has resulted in a reduction in nighttime road accidents, ensuring safer transportation for both camels and their owners, with 785 camel carts equipped with reflectors in 2021-2022.

Enhanced comfort: The distribution of plastic nose pegs for 1316 camels has enhanced their well-being and comfort, reducing injuries and discomfort during work.

Community awareness: Informative leaflets and community training sessions have raised awareness among camel owners about proper care and welfare practices, fostering a culture of responsible ownership and compassion.

Rescue and rehabilitation: Establishment of rescue and rehabilitation centres has provided distressed camels with sanctuary, ensuring their recovery and well-being.

Key takeaway

HIS's Camel Welfare Program demonstrates the transformative impact of a holistic approach to animal welfare. By combining veterinary care, preventive measures, community education, and dedicated rescue facilities, HIS has not only improved the welfare of individual camels but has also fostered a broader culture of responsible ownership and compassion towards these animals, setting a precedent for humane treatment practices.

Elevating Equine Welfare Standards | Brooke India

Brooke India (BI) is an international charity focused on improving the lives of working horses, donkeys, and mules in India. Since 2000, BI has operated directly through 36 Equine Welfare Projects (EWPs) across 11 States and Union Territories, reaching approximately 2,15,073 working equids and their communities. Additionally, BI extends its reach indirectly to a broader population of equines, employing multi-disciplinary teams with core strengths in animal health, welfare, and community development.

Interventions

Advocacy for Equine Welfare Guidelines: BI advocated for the issuance of guidelines by the Animal Welfare Board of India (AWBI) to promote equine health and welfare during equine fairs, at shrines, and while working at brick kilns.

Policy Influence and Collaboration: BI led strategic collaborations and policy advocacy, shaping measures to elevate the welfare standards of working equines. This effort saw the implementation of AWBI guidelines for equines at brick kilns and the adoption of small ear tags for insured working equines, ensuring enhanced protection and well-being.

Impact

Increased Compensation: BI's advocacy resulted in a significant rise in compensation amounts for euthanized equids diagnosed with Glanders, providing better support to equine owners in distress.

Improved Welfare Standards: Issuance of guidelines and advisories by AWBI and the Animal Husbandry Department have contributed to enhanced welfare standards for working equines across various sectors, including equine fairs, shrines, and brick kilns.

Inclusion in Livestock Insurance: BI's persistent efforts led to the inclusion of equines (horses, donkeys, and mules) under livestock insurance by the Animal Husbandry Department of the Government of India in 2017.

Expanded Reach and Awareness: Through its Equine Welfare Projects and partnerships with knowledge and institutional partners, BI has directly reached over 2,15,073 working equids and indirectly impacted a broader population of equines and their owners.

Key takeaway

Brooke India's concerted efforts in advocacy, policy influence, and community engagement have resulted in tangible improvements in equine welfare standards across India. By collaborating with stakeholders and driving awareness, BI continues to make strides in ensuring a better quality of life for working equids and their communities.

The need of the hour is increased attention and awareness of the specific location, working conditions and socio-economic conditions of the communities which tend to them.

The Way Forward: A roadmap for working animals' welfare in India

Establishment of Veterinary Standards and Accessible Care

Recognizing the need for improved health and welfare of working animals, especially in rural areas.

1 Affordable healthcare
Improving the health and welfare of working animals, particularly in rural areas, necessitates ensuring affordable access to veterinary care.

2 Species specific veterinary training
Establishing and promoting veterinary institutes, ensuring there are sufficient registered and compliant farriers, enforcement of laws that prohibit unskilled individuals from treating these animals, and upskilling veterinarians on the treatment and care of animal species used for work and labour.

3 Minimum welfare standards and law enforcement
Enforcement of the anti-cruelty laws that prohibit the most unnecessary and cruel practices is important to ensure minimum welfare standards for working animals in India. In cases of pandemics or natural disasters the government must step in to ensure these animals do not die slow painful deaths from the resultant effects of poverty on their owners.[67]

Promotion of alternatives

Contributing to economic development and improved animal welfare by enabling access to affordable technology to reduce reliance on working animals.

1 Subsidising technology
Alleviating the burden on working animals in evolving economies involves subsidising technologies like tractors, and other machinery for agriculture and transportation, can reduce the reliance on working animals while boosting productivity and income for farmers and labourers.

2 Subsidising welfare-oriented implements and tools
The business of animal labour is not profitable enough in most cases to take sufficient care of the animals. In many cases the government must step in to ensure that the equipment being used on these animals is not unnecessarily cruel and if they do not have the funds, to either assist with alternative income generation options or provide the equipment or funds for the same.[68]

3 Training programs
Implementing training programs aimed at facilitating a smooth transition to new occupations for those previously reliant on working animals. These programs can offer skills development, vocational training, and support services to help individuals adapt to new technologies

Awareness and knowledge among owners

Addressing the lack of awareness among equine owners about diseases and proper practices.

1 Good health and wellbeing practices

Addressing the lack of awareness among equine owners about diseases, proper practices, and the impact of harsh working conditions is crucial. Initiatives should focus on providing information, ensuring the availability of necessary medications, raising awareness about veterinary services, and fostering connections between equine owners and service providers. Animal markets and fairs can be used as venues to disseminate information on the same by trained professionals like veterinarians.[69]

Infrastructure Development

Prohibiting the use of mules and horses for carrying people to remote locations such as religious sites, and introducing humane and sustainable alternatives, like battery-driven vehicles

1 Enhance road infrastructure

Improve roads to discourage animal-drawn transport and allocate resources for road maintenance and expansion.

2 Involving women

Emphasising an inclusive approach, especially for women, training programs should actively champion "agents of change" at the community level

2 Expand Public Transport

Invest in affordable alternatives like buses, trains, and trams, and introduce new routes to cover underserved regions.

3 Incentivize Battery Vehicles

Encourage operators to switch to battery-driven vehicles.

Inclusion of working equine animals in policy and programmes

Advocating the inclusion of donkeys, horses and mules in welfare policies.

1 Livestock Policy Integration

Incorporate donkeys, horses, and mules into Livestock Policies

2 Sector-Specific Welfare

Implement "Working Equine Welfare Friendly" policies in sectors where they work.[70]

Animal use for entertainment

A lifetime of entertainment offered by circuses, animal sport festivals and dancing street animals, has led many to relegate living animals to a mere commodity status – meant to be reined in, caged, and commanded to entertain us.

Street entertainment

Many Indians grew up as spectators to street performances featuring dancing bears, monkeys, and snakes, presided over by a "ringmaster." Many also may have gone horse-riding around the neighbourhood, on buggy rides through town, or beach picnics with horse and pony rides. The entertainment this may have provided often masked the suffering of the captive animals.

Circuses

From the years of reduced rent rates, no entertainment tax, and subsidies for circuses[71] to today, when the use of wild animals in circuses has been banned, animal use for entertainment has been a complex issue, with several socio-economic bearings.

> *There were many children in each family and one or two were sent to circuses in the hope that at least they would not starve.*

–Nirmala K.M [72]

The flipside, however, was that circuses were also venues of animal cruelty; performing animals were often subjected to painful training methods like beating, whipping, and shocking. They were also confined in small cages or crates, which harmed their physical and mental well-being. The lack of accountability regarding where the animals came from, how they were trained, and their living conditions raised serious animal rights issues.[73]

Traditional sports

Traditional like sports Jallikattu, Kambala and other bull taming festivals are rampant across India. Despite the recognised inherent cruelty of these sports, cultural sentiments have resulted in a strange legal scenario that allows them to continue relatively unchecked. At these events and in preparation for the events, bulls are subject to extreme torture, injury and cruelty. Moreover, this event also has roots in gender and caste inequality.[74]

Cinema and television

In the film, television, and advertising industries, animals face the persistent risk of punitive measures while performing. The imperative to optimise time, a critical commodity in these sectors, places significant pressure on trainers to elicit correct performances from animals within minimal takes. As a result of stringent financial constraints, handlers may resort to severe disciplinary methods and excessive force during training sessions to ensure the animals respond appropriately on set. Additionally, trainers may employ the withholding of food as a means of reinforcement. Adhering to strict rules is critical in this line of work.
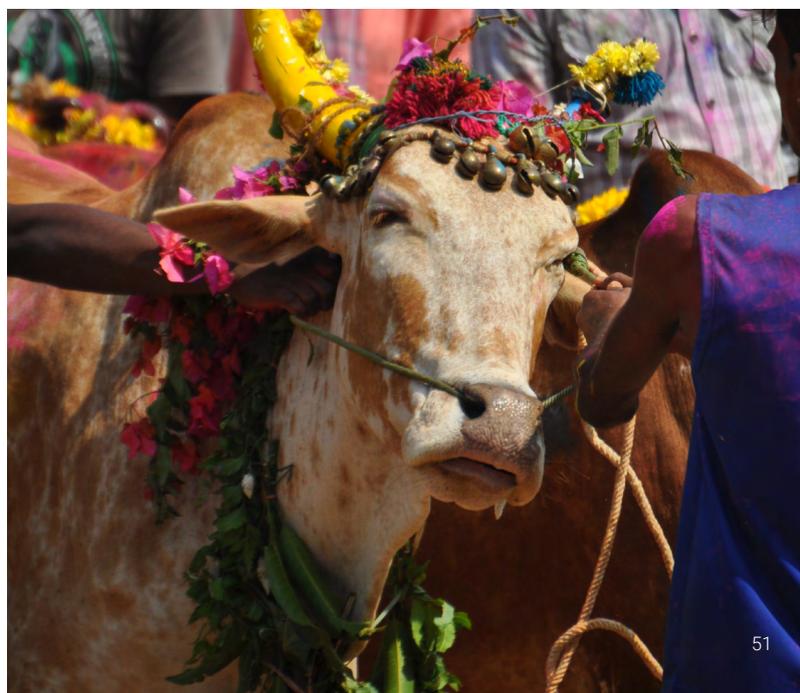
Case Study 2 | Putting An End to the 'Dancing Bear' Practice by Wildlife SOS (2015)

In rural and peri-urban India, 'dancing' bears were once a common sight. Wildlife SOS, determined to end this practice, faced initial resistance from the Kalandar community, deeply entrenched in poverty and dependent on training bears to dance for income. Living among them in 1996, Wildlife SOS discovered the desperation and illiteracy that perpetuated the cycle. Recognizing that rescuing bears required addressing the root cause, the organisation worked to gain the community's trust and cooperation. Over time, their efforts led to a shift in perspective, fostering a move away from the exploitative tradition towards a more humane and sustainable way of life.

The Dancing Bear Project by Wildlife SOS aimed to liberate both bears and their owners from the cruel tradition of bear dancing in India. The plan involved exchanging a former dancing bear for a seed fund and support to start a new business for the bear dancer. Women from the community received skill training and a market for their products, while the children were sent to school with all expenses covered. The success of the project exceeded expectations, with Kalandar men willingly surrendering their bears at rescue centres across the country. The holistic approach provided the Kalandar community with sustainable alternatives, transforming their lives and ensuring a secure future for their children. On December 18, 2009, the last dancing bear named Raju entered the Bannerghatta Bear Rescue Centre, marking the end of the centuries-old barbaric practice. Wildlife SOS celebrated this historic moment, reflecting on the collective achievement and the new, free lives the bears now enjoyed in their sanctuaries.[76]

Photo- Wildlife SOS

# Examining the welfare of animals used in testing and experiments

CHAPTER SNAPSHOT

In India, animals are used for drug testing and safety assessments across **1750** registered facilities. Though this has been a standard method for decades, it is increasingly being recognised that animal testing is often unnecessary and counterproductive, and is replaceable by Non-Animal Methods - which are more efficient, time and cost-effective, and ethically sound

1 Issues for animals

- Isolation and intensive confinement
- Injury, disease, and pain
- Perpetual state of stress
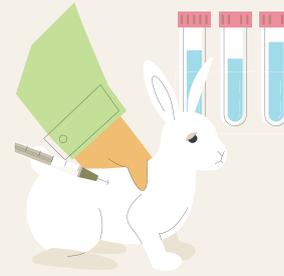
These issues cascade into human communities

They affect public health due to the lack of reliability of results from experiments and the discordance between human and animal physiologies, and on the laboratory workers and proximate environment due to the conditions in which animals are bred, housed and tested.

2 In India, however, several barriers block the scaling of Non-Animal Methods

- Limited focus on this topic at research institutions
- Lack of clear understanding of the alternate technologies available, associated costs and availability of suppliers
- The lack of regulatory guidelines allowing for a switch to non-animal models

3

Regulators the world over have modified regulations on animal testing, including the 2019 EU Revised Guidelines on animal testing by pharmaceutical companies, USA's 2022 FDA Modernisation Act 2.0, the 2022 Government Bill to promote Non-Animal Methods, and the 2023 Amendment to the New Drugs and Clinical Trials Rules (2019), authorising researchers to use non-animal and human-relevant methods and technologies like 3D organoids, organs-on-chip, and advanced computational methods[99]

4 A roadmap for the enhanced welfare of animals used in testing and experimentation

- Developing a positive regulatory landscape for human-specific non-animal methodologies (NAMs)
- Introducing comprehensive alternative drug discovery and development curricula and research programs
- Facilitating collaboration, cross-learning and data sharing between the pharma industry, academic institutions, researchers, biostatisticians, and regulators
- Fostering Centers of Excellence (CoE) in India to foster research on Alternatives to Animals that can compete globally
- Implementation of the Committee for the Purpose of Control And Supervision of Experiments on Animals (CPCSEA) guidelines and the 4 R framework in animal experimentation: Replacement, Reduction, Refinement, and Rehabilitation

Any animal used for the investigation of basic biology and human disease, or drug research, development, toxicity and safety, falls under this segment.[1]

Currently in India, there are about 1750 registered private and public facilities practising animal testing and experimentation for biomedical research. Estimates suggest that India annually uses over 1 million animals for research, and that this quantum may increase at the rate of 20% through the next decade.[2]

The Haffkine Institute, founded in 1899 in Mumbai, was one of the earliest establishments to utilise laboratory animals in India, particularly in the production of plague and rabies vaccines and anti-snake venoms. Since then, experimentation and testing using animal models have grown in tandem with the growth of India's medicine and pharmaceutical industries.[3] Global progress on human health owes a great deal to millions of laboratory animals. However, animal testing and experimentation haven't always led to cures, as most times, animals cannot capture the exact nature of a human disease or accurately predict the safety and efficacy of medicine. Moreover, the use of animal models involves extensive timelines, high costs, and intense trauma to the animals.

Over the past decade, human-relevant, alternative models of testing have become available, and it is important to assess how best India can absorb those models. Given India's strength in the medical and pharmaceutical fields, it can undertake an objective and unprejudiced exploration of animal-free approaches to biomedical research, and develop more robust performance indicators for them.

Scientists Speak

The humble laboratory mouse has taught us a phenomenal amount about embryonic development, disease, and evolution. And, for decades, the pharmaceutical industry has relied on these critters to test the safety and efficacy of new drug candidates. If it works in mice, so we thought, it should work in humans. But when it comes to molecules designed to target a sepsis-like condition, 150 drugs that successfully treated this condition in mice later failed in human clinical trials—a heartbreaking loss of decades of research and billions of dollars.

Mice use distinct sets of genes to tackle trauma, burns, and bacterial toxins—when the authors compared the activity of the human sepsis-trauma-burn genes with that of the equivalent mouse genes, there was very little overlap. No wonder drugs designed for the mice failed in humans: they were, in fact, treating different conditions!

More than 30 percent of all drugs successfully tested in animals later prove toxic in human trials. The NIH plans to commit $70 million over the next five years to develop "tissue chips"—miniature 3-D organs made with living human cells—to help predict drug safety and efficacy. Though this is high-risk research, these chips may ultimately provide better models of human disease and biology than the use of animals.

–Dr. Francis Collins, Of Mice, Men and Medicine (2013).[4]

It is certainly time now that the scientific community considers using the available validated alternative methods and prioritizes the replacement of animals, over the refinement and reduction strategies. With new, stricter regulations and smarter and scientifically validated alternatives being developed by scientists, we can certainly be hopeful that the number of animals used in research, testing, and education will continue to decline in the future.

–Shikha Yadav and Vijay Pal Singh, Alternatives to Animal Experiments in Research and Regulatory Testing[5]

Issues on the ground

When it comes to experimentation on animals in India, issues include the attitudes towards the treatment and use of animals, the provision of infrastructure for their welfare, and the uptake of New Alternative Methods.

Currently in India, animals are utilised in various fields including biological studies, research and development, quality control of medical and veterinary products, preclinical toxicological evaluations, safety assessments of vaccines and antibodies, and drug testing. While many actors in the industry uphold the highest ethical and compliances standards, there is evidence that the industry also sees significant non-compliance too. There is scarce updated data available on the number of laboratory animals used and the conditions they are kept in. Investigations by government bodies and non-profits have found that certain industry actors fail in three key areas:

1   **Non-compliance**: operating without full compliance with guidelines set by the Committee for Control and Supervision of Experiments on Animals (CCSEA)

2   **Non-provision of minimum welfare standards:** failing to provide the required environmental, social and food enrichment to the animals

3   **Non-adherence to reduction:** failing to curtail unnecessary pain, suffering and the wasteful use of animals[6]

Consequently, these failures manifest as challenges on the ground, which not only affect the animals, but also immediate workers assigned their care and upkeep, and more largely, the integrity of the experiments and research themselves.

Living conditions of the animals

Animals bred and housed at research facilities experience significant deprivation, stress, and isolation, even before they undergo any experimental procedures. They are often bred in captivity and housed in metal cages, and they spend time alone without opportunities for social interaction or natural behaviours. The stress of separation, capture, transportation, confinement, and breeding significantly impact the well-being of these animals.[7]

Injury, disease, and pain

Animals in laboratories undergo routine and often painful procedures, including forced restraint, isolation, starvation, drug addiction, and invasive experiments. For instance, equines are used in India to manufacture anti-toxins or antivenins; in 2015, a team appointed by the Animal Welfare Board of India investigated 10 equine facilities and found abuse and neglect of thousands of horses, mules, and donkeys. These animals were confined to unsanitary and overcrowded conditions, suffering from various ailments including anaemia, lesions, digestive tract diseases, hoof abnormalities, and severe infections. Inspectors also discovered instances of animals being left to die slowly after use, instead of being euthanised. Many facilities were not registered with the Committee for Control and Supervision of Experiments on Animals (CCSEA) to conduct procedures on animals. Additionally, some facilities housed pregnant mares and foals without official registration as breeders, raising doubts about the reliability of experiments conducted using these animals as test subjects.[8]

Stress

Apart from physical pain, illness, and injury, animals undergoing common laboratory procedures often experience significant stress responses. Routine activities such as handling, venipuncture, and gavage can lead to elevated pulse, blood pressure, and steroid hormone release, lasting for extended periods. Stress reactions are also observed during caging, isolation, and blood collection. These responses not only impact research outcomes but also highlight the trauma endured by animals in laboratory settings.[9]

Cascading Effects

How does suffering of animals in experimentation cascade into human and environmental challenges?

Reliability of animal testing

In animal testing, reproducibility, and replicability are contentious. Several factors contribute to the replication failures of findings derived from research on animal models:

Firstly, many animal studies in the field of behavioural neuroscience are exploratory in nature and often have low statistical power. This means they may not reliably detect true effects, leading to a lack of repeatability and variability in the results. Additionally, researchers may selectively report significant data through practices like "p-hacking,"where only statistically significant results are reported, or "HARKing," where hypotheses are formed after seeing the results.

Secondly, poor methodology in animal models, such as inadequate data collection and description, further undermines the reliability of findings. Many published studies lack critical information on factors like the age, sex, and number of animals used, as well as details on randomisation and blinding procedures.

Thirdly, generalising findings from animal experiments is challenging due to various biological and environmental factors. Factors like strain, age, sex, and environment can significantly influence study outcomes, even when standardised. For example, a study involving different mouse strains conducted across multiple labs found strikingly different results despite standardised laboratory conditions.[1]

Worker safety

Personnel like cagewash technicians, animal care technicians, and veterinary technicians, who are closely involved in animal research face unique occupational hazards that differ from those encountered by clinical staff in the healthcare sector. Injuries can occur during routine tasks such as handling animals, cleaning cages, providing food and water, or disposing of hazardous materials. Exposure to toxic agents can happen through different routes such as skin contact, inhalation, ingestion, or exposure to gases, vapours, and particulate matter. Additionally, staff working with research animals face increased risks of scratches and bites.[2]

In India, there is no publicly available data on the conditions in which animal laboratory technicians work, and whether they use appropriate PPEs and biosafety training. In investigations at equine facilities in India, it was found that the staff did not have knowledge of proper animal care and management techniques, and that the few employed vets weren't aware of pain-management procedures.[3]

Environmental hazards

Animal methods of testing generate far more waste than New Alternative Methods. Euthanised or deceased animals, their bedding, caging, needles, and syringes must be routinely disposed in a scientific manner. Failing to do this introduces highly toxic substances into the environment, such as irritants, corrosive substances, asphyxiants, neurotoxins, and carcinogens - which are frequently used for extended time periods and in large quantities at testing facilities. Although methods of waste disposal are in line with scientific practices, the volume of waste generated leads to higher environmental degradation

The emission of gases resulting from the incineration of animal carcasses, toxic chemicals, and laboratory supplies, leads to air toxicity – with little known about its status in India presently.[4]

Influence of laboratory procedures and environments on experimental results

Laboratory procedures and environments can significantly influence the physiology and behaviour of animals, ultimately impacting research outcomes.

Animals in laboratories are subjected to artificial conditions that can prevent species-typical behaviours, and cause abnormal behaviours. Routine procedures, confinement and artificial lighting, can cause prolonged stress in animals, affecting their physiological parameters and potentially confounding research data.

Additionally, various laboratory conditions can induce changes in neurochemistry, genetic expression, and nerve regeneration, further complicating experimental outcomes[xiv]. For example, a 4ºC temperature change can prompt a 10-fold biological response shift, impacting fertility and lactation. Elevated temperatures, especially with high humidity, lead to ammonia buildup. Inadequate ventilation results in high ammonia levels, causing respiratory irritation for animals and attendants, reducing their resistance to infections.[5]

Discordance between human diseases and animal models

Animal toxicity studies, for example, often fail to accurately predict how drugs will affect humans. This reliance on non-predictive animal experiments can lead to the generation of misleading data on the safety and effectiveness of treatments, potentially leading to the abandonment of beneficial medical therapies as well as risks to individuals participating in human trials.[6]

Success Stories

Here's how multiple stakeholders are coming together to address animal welfare in conjunction with livelihoods, health, and environmental benefits.

The welfare of animals used in experimentation and testing significantly overlaps with human wellbeing.

Spared Animal Testing in Drug Registrations | PETA India

The problem lies in the ethical concerns surrounding redundant animal testing for drug registrations, despite comprehensive data from prior toxicity experiments being available internationally. This practice not only subjects animals to unnecessary suffering but also raises questions about the validity and reliability of the tests conducted.

Interventions

Advocacy and Appeals: PETA India, Union Minister Maneka Gandhi, and renowned personalities like Gillian Anderson advocated for the removal of redundant animal testing requirements. They made appeals to the MoHFW, urging them to amend the rules to spare animals from cruel and unnecessary tests.

Public Support: Numerous individuals supported the ban on redundant animal testing through PETA India's online action alert, demonstrating widespread public concern and support for animal welfare.

Impact

Legislative Amendment: MoHFW passed an amendment to Schedule Y, sparing animals from redundant testing when sufficient data from prior experiments conducted abroad are available.

Progress Towards Alternatives: The amendment reflects a shift towards more progressive and humane approaches to drug testing. It acknowledges the limitations of animal testing and encourages the development and adoption of sophisticated non-animal testing techniques.

Advancement in Science: The amendment encourages the adoption of advanced non-animal testing techniques, such as "organs-on-chips," which replicate human physiology and drug responses more accurately than traditional animal experiments. This shift in approach fosters scientific advancement while prioritising animal welfare.

Key takeaway

The amendment represents a significant step towards reducing animal suffering in drug testing and promoting more effective and humane approaches to research. By sparing animals from redundant tests and encouraging the adoption of advanced testing methods, India demonstrates its commitment to both scientific progress and ethical treatment of animals.

Forever homes for laboratory-released Beagles | Freagles of India

Freagles of India stands as a beacon of hope for beagles in India, providing them with a second chance at life beyond the confines of testing laboratories. Established with a firm commitment to the welfare of these animals, Freagles of India operates within the framework of CPCSEA Guidelines to ensure the ethical treatment and rehoming of these animals. Through a comprehensive process of medical care, emotional support, and dedicated foster homes, Freagles of India prepares these beagles for their transition into loving forever homes.

Beagles, chosen for their size and docile nature, are unfortunately subjected to unimaginable suffering in research laboratories. Kept in cramped cages for days and months, they are deprived of basic freedoms. This confinement and isolation can lead to severe psychological distress, akin to stress-induced psychosis in humans. Despite their trusting and playful nature, these creatures endure unimaginable hardships, subjected to toxins and chemicals in experiments.

Since its inception in 2016, Freagles of India has successfully rehabilitated 472 such beagles, each representing a story of resilience and renewal. The trust's unwavering dedication is evident in its meticulous adoption process, which prioritises the well-being of the animals above all else. As it celebrates three years of impactful operation, the trust remains steadfast in its commitment to making a positive difference in the lives of laboratory-released beagles, setting a precedent for humane animal welfare practices in India.

Photo- Freagles of India

Commitment to Cruelty-Free Beauty | The Body Shop

Before the nationwide ban on animal testing for cosmetic products, animals endured painful experiments to assess product safety, efficacy, and hypoallergenic properties. This practice prompted widespread concern among animal welfare organisations. Against this, The Body Shop emerged as a global leader, advocating for cruelty-free beauty and spearheading awareness and transformation within the beauty industry.

Founded in 1976 in Brighton, England, by Dame Anita Roddick, The Body Shop is a global beauty brand seeking to make a positive difference in the world by offering high-quality, naturally-inspired skincare, body care, haircare and make-up produced ethically and sustainably. The Body Shop was the first global beauty brand to fight against animal testing in cosmetics and has strongly advocated for humane alternatives to animal testing since its inception. Over the last three decades, The Body Shop has worked with campaign partners Cruelty Free International and their collective efforts led to the original European Union ban in 2013. In 2017, the brand launched 'Forever Against Animal Testing', the biggest campaign ever to call for a ban on animal testing in cosmetics products and ingredients, everywhere and forever. Together with its partner Cruelty Free International, they gathered over 8 million signatures - with half a million from India alone - calling upon the UN to push forward a global ban.

In January 2024, The Body Shop became the first global beauty brand to have 100% of its product formulations certified by The Vegan Society. This commitment demonstrates the brand's determination to set the highest possible bar in sustainable and ethical beauty.

Interventions

Product Formulation: The Body Shop guarantees that every product is 100% free from animal testing, from raw ingredients to the final item. The company invests in innovative, non-animal testing methods and has achieved 100% vegan product formulations across all ranges.

Consumer Education: The Body Shop actively educates consumers about the importance of cruelty-free beauty through campaigns, petitions, and in-store initiatives.

Establishing Industry Standards: Pioneering cruelty-free beauty practices, The Body Shop has helped established new benchmarks for the industry.

Impact

The Body Shop was the first global beauty brand to fight against animal testing in cosmetics back in 1989. Since then, the brand has been campaigning relentlessly against this practice with a fundamental belief that animals should not be harmed in the pursuit of beauty. The Body Shop's advocacy efforts have contributed to significant policy changes globally, including India's ban on cosmetic animal testing in 2013, positively impacting millions of animals annually.

Key takeaway

The unwavering commitment of The Body Shop positions it as an industry leader and pioneer in cruelty-free beauty. Its products not only cater to consumer preferences but also drive positive changes in industry practices and policies, cultivating a more compassionate and ethical beauty landscape.

Figure 5: Timeline of policy reforms for enhanced animal welfare in scientific testing in India

The use of animal models cannot be undone overnight, but a scientific approach coupled with innovation and compassion can lead the work ahead. The field of animal testing itself has set precedents to enhance animal welfare widely, especially the addition of the 4th "R" to the animal welfare framework - Rehabilitation.

1998, followed by amendments in 2001 and 2006

The Breeding of and Experiments on Animals (Control & Supervision) Rules, 1998[19]

1. Formation of the Committee for the Purpose of Control and Supervision of Experiments on Animals, which provided for the setting up of Internal Animal Ethics Committees.

2. Creation of minimum welfare standards

3. Release of mandate requiring registration with the CPCSEA for institutions involved in breeding and using animals for experiments

4. Included the "3 R Framework" (Replacement, Reduction and Refinement)

2004
CPCSEA includes fourth 4th "R" (Rehabilitation) into the 3 R Framework[20]

2009
Medical Council of India (MCI) instructs medical colleges to start using methods other than animal experiments for MBBS students[21]

2012
Ministry of Health and Family (MoHFM) bans the use of animals in educational institutes[22]

2013
The Bureau of Indian Standards (BIS) bans the use of animals in cosmetic testing[23]

2014
1. Ministry of Health and Family Welfare (MoHFW) bans the use of animals for cosmetic testing[24]
2. India bans the import of animal tested beauty products[25]

2016
1. MoHFW bans the use of "Draize irritation test" using rabbits[26]
2. MoHFW passed an amendment sparing repeatr animal testing for new drugs in cases where previous data exists[27]

2017
Ministry for Agriculture revises its pesticide testing regulations to recognize modern, human cell-based alternatives[28]

2023
Government of India has passed New Drugs and Clinical Trial Rules that aims to replace the use of animals in research, especially in drug testing[29]

Although there's a gradual regulatory acceptance of alternatives, such as the prohibition of animal tests for cosmetics and drugs and amendments in safety testing requirements for pesticides, scientists and laboratories focused on developing non-animal technologies must be built, supported and leveraged, both in the public and private sectors. Parallelly, the welfare and rehabilitation of currently captive animals also requires urgent attention.

> "While there is a global effort to advance these technologies for translational research, in India, a major challenge is the scarcity of highly skilled professionals. Elite scientists across the country, with established labs, are typically trained abroad gaining interdisciplinary expertise. Consequently, there is a dire need for indigenous skill development programs to train next-generation scientists, leaders, and entrepreneurs in human-relevant technologies."

- Tejaswini Dhurde, Sr. Science Communicator, Centre for Predictive Human Model Systems, Atal Incubation Centre-Centre for Cellular and Molecular Biology (AIC-CCMB)[30]

Photo- https://bit.ly/367IovU

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Developing an alternative roadmap for India:

A key step forward is framing an India-specific roadmap to transition to non-animal testing methods for drug research and safety assessments. Collaboration among government, private sector, public sector, and academic/research institutions is essential for this transition.
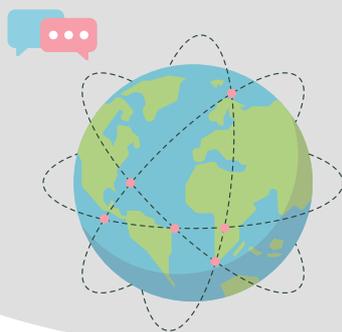
1 Developing a positive regulatory landscape for human-specific non-animal methodologies (NAMs)

As India looks ahead, it can take inspiration from a global trend towards regulatory frameworks supporting Non-Animal Methodologies (NAMs). For instance, USA's Federal Food, Drug, and Cosmetic Modernisation Act 2.0 (2022) encourages the development and utilization of alternative testing methods such as in vitro and computer-based models. Similarly, the EU's guidelines on animal testing mandate pharmaceutical companies to prioritize non-animal testing methodologies whenever feasible, requiring scientific justification for any use of animal testing. In 2023, India also followed this step, making NAMs permissible and actively promoting them, particularly in drug development. Embracing and further advancing these practices can propel India towards more ethical and innovative approaches in research and development, positioning the nation as a global leader in the field.[31,32,33,34]

2 Upskilling and scaling

There's a significant opportunity to fill the gap in educational institutes by introducing comprehensive alternative drug discovery and development curricula, and research programs. Doing so will equip graduates with the necessary skills for conducting independent and innovative research in the field, and help build skills in realising the transition to non-animal methodologies in India.[35]

3 Facilitating cross-learning and data sharing

Establishing international and interagency collaborations among major organizations and funding bodies is crucial for advancing research on NAMs in drug development and safety testing. This data should be collected in collaborative, open-access, and high-quality databases. For instance, systems like the OECD Mutual Acceptance of Data (MAD), which India fully embraces despite not being an OECD member, exemplify the widespread benefits of data sharing in safety testing. This includes reducing redundancy in testing, lowering costs, facilitating regulation, and bolstering global trade.[36]

4 Establishing Centres of Excellence

The government should actively encourage the establishment of Centers of Excellence (CoE) in India to foster research on Alternatives to Animals that can compete globally. Priority funding should be directed towards research focusing on human-based biology rather than refined animal models. While the announcement in 2019 regarding the establishment of a Center of Excellence in Human-Pathway-Based Biomedicine and Risk Assessment was promising, its delayed realization is a missed opportunity. Nonetheless, establishing such a centre would be a significant stride towards positioning India as a leader in Drug Discovery and Development. Initiatives like the Centre for Predictive Human Model Systems exemplify efforts promoting research and collaboration to advance NAMs.[37, 38]

5 Funding

It is essential to establish international and interagency collaborations among major organisations and funding bodies. Prioritising funding for research centred on human-based biology over "improved" animal models is crucial. Additionally, focus should be placed on developing and optimising 21st-century tools and infrastructures such as bio-engineered 'human on a chip' and next-generation computer modelling. As has been done in multiple cases through requests for proposals (RFPs),[39,40,41] governments and funding institutions must continue to and increase its support towards institutions, startups and enterprises, to nurture concepts into prototype stages. India's aim should be self-reliance in technologies supporting research, reducing dependence on costly imported technologies.

Promote Animal Welfare and Ethical Standards

a Implementing and enforcing law and policy

The rigorous implementation of the CPCSEA guidelines can be addressed through stringent accountability measures, particularly regarding personnel, breeders, and regulatory body members' training within research institutes utilising animals. Comprehensive training and sensitisation for all staff involved with animals are crucial. Providing care, good nutrition, and clean environments improves animals' quality of life, ensuring longevity, especially vital during experimental procedures due to elevated stress levels. Additionally, maintaining an adequate pool of skilled individuals for Internal Animal Ethics Committees is essential.

b Implementing the 4 Rs

India's adaptation of the 4 R framework in animal experimentation includes Replacement, Reduction, Refinement, and Rehabilitation. This framework guides ethical animal use in research. Replacement encourages using alternatives to live animals. Reduction advocates for fewer animals without compromising research integrity. Refinement focuses on minimizing animal distress. Uniquely, Rehabilitation, distinct India, emphasizes post-experimental care, aiming to restore animals' health and return them to suitable environments.[42]

c Increasing transparency

Implementing accountability and ensuring full transparency across industries that utilize animals is crucial. Sharing comprehensive information about animal use throughout the supply chain is essential to reduce opacity, raise awareness, and enhance education. Presently, there are no publicly accessible sources detailing the number of animals used in experiments in India.

Examining the welfare of Community Animals in India

CHAPTER SNAPSHOT

In India, community animals, including dogs, cats, bovines, and equines, are recognized as vital stakeholders in the environment, with an estimated population of over **80 million**. Yet, the suffering of community animals is immense, as they navigate built environments (not built for them) and survive on limited resources – mostly waste generated by humans.

1

Issues for animals

- **abuse and violence**
- **resource competition**
- **hunger**
- **malnutrition**
- **disease**
- **accidents**

2

How these issues cascade into human communities

- **Public Health:** zoonotic diseases transmission, physical injuries, aggression and mental health issues
- **Conflict:** cyclical human-animal conflict in close quarters, and social conflict between people who care for animals and those who want to keep community animals out of shared spaces
- **Road Safety:** animal-vehicle collisions.

3

Interventions spotlighted

- Educational and comprehensive care program | **Raksha Foundation**
- Rehabilitation of community cats | **Feline Foundation**
- Needs assessment study | **India Animal Fund**

4

A roadmap for the enhanced welfare of community animals

- **Enforcing existing animal protection laws:** establishment of functional animal welfare bodies, managing population in humane ways, the creation of a centralized data repository, and cracking down on illegal breeding of companion animals.
- **Building inclusive infrastructure:** animal-friendly architecture, scaling 'model districts' with active SPCAs and emergency care facilities, ensure the safety and well-being of community animals.
- **Fostering community engagement:** Promoting awareness, empathy, and positive interactions between humans and animals through public campaigns, community mobilization, and education initiatives fosters a shared responsibility for coexistence.

- **Adoption of homeless dogs and cats:** Creating awareness that indigenous breeds of dog and cat make perfectly good pets, marketing adoptions as both kind and fun for families, and supporting organizations that counsel families and help them adopt the right animal for them.

A community animal, commonly referred to as "street animal" or "stray" is a canine, feline, bovine, or equine born, abandoned in, or inhabiting a public space, and unclaimed by any individual or organisation.[1]

India has about 80 million animals dwelling in public spaces, and uniquely recognises them as 'community animals', stakeholders and inhabitants of the environment.[2] Yet, a large proportion of human-animal conflicts[3] are seen in this segment of animals, requiring far greater awareness, alignment, and action.[4]

India has a range of attitudes towards community animals: empathy, indifference and abhorrence. On the one hand, there's a profound acknowledgement of animals as co-inhabitants of the land, reflected in how humans and animals seamlessly share spaces, and in architectural considerations such as public bird houses, public food bowls, and protective shelters for cows.[5,6] Conversely, India grapples with the highest rate of pet abandonment globally, has one of the highest rabies fatalities, and thousands of human and animal fatalities due to community-animal-related accidents.[7,8,9] Survival is not easy for community animals, with approximately 1.5 million community animals succumbing to road accidents alone annually and a staggering 75-90% mortality rate among community-born animals before the age of six months.[10,11]

Parallel inhabitants: Who India's 75 million+ community animals are, where they come from, and how they grow
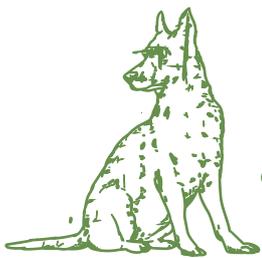
62 million
dogs[12]

One of the oldest dog breeds in existence today, the "pariah" or "indie" have lived among human communities for millennia, largely subsisting as scavengers. Today, this population consists of a mix of indies and abandoned companion dogs, often pure-bred.[15]
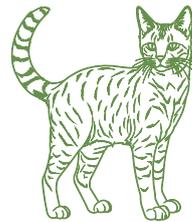
9.1 million
cats[13]

community cats in India are a mix of abandoned domestic cats, or descendants of feral cats that have adapted to urban and rural environments over generations.

5 million
bovines[14]

Some community cattle are abandoned by their owners due to the inability to care for them, old age, or unproductivity. Others might stray away and get lost from their herds due to open grazing, inadequate fencing or negligence.
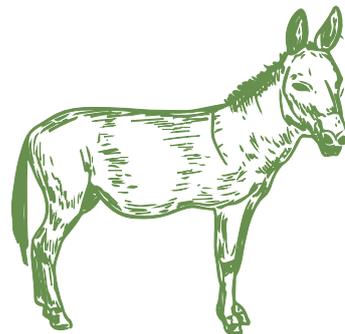
Equines[15]

community equines, including horses, donkeys, and mules, are usually working animals who become lost or abandoned due to owners' inability to care for them, mechanization, or because they are no longer useful.

The populations of community animals grow in consonance with biological, geographical, economic and regulatory movements.

Canines

In just six years, one unaltered (not neutered) dog and her offspring can produce 67,000 puppies.[18]

Cats

In just one year, one mating pair of cats and their offspring (consisting of 2 subsequent litters) can produce 34 kittens.[19]

Cows

Rising populations of stray cattle are closely connected to changing market trends and regulations. As the key drivers of India's milk economy, cows produce milk until they are 7 years old, after which they are typically transferred into the meat industry. Considering beef bans in several states, and accompanying vigilantism, retired cows are now increasingly abandoned. Moreover, the replacement of working cows with machinery has also led to several being abandoned.[16,17]

These numbers represent serious gaps in India's efforts to secure community animal welfare and human-animal co-existence in public spaces.[20] India can begin to bridge these gaps by practising the scientific and compassionate management of community animals.

Even though community animals live in the built environment, urban planning and initiatives have almost exclusively been approached from an anthropocentric (human) lens, focusing on human health and happiness. Nonetheless, animals need to be considered in contemporary and future environments, particularly in countries with rapidly changing landscapes.[21]

Figure 6: How they survive on the margins

Community animals remain firmly at the bottom of the socio-economic hierarchy, literally surviving from day to day on the refuse of humans.

" *Cats control rodent populations, prevent other cats from moving into the area and protect against snakes – stories from residents confirm how stray cats protected them when snakes were seen in the vicinity.*

–Sumana Paul and Kalpita Mane, Whitefield (Bengaluru)[24]

" *With their hearing capacity almost seven times that of humans, imagine what a blind horse must be going through in a crowded marketplace. They have no way of shielding themselves against accidents either.*

–Meet Ashar, Legal Advisor[25]

" *There are designated spots allocated by the housing society to feed dogs. When we arrived at one of the spots, we saw people walking with lathis. When my husband and I started feeding them, a mob of around 30-40 people gheraoed and questioned us. The mob chased us till our tower and kept beating us till the police arrived*

–Divya Saha, Mumbai[26]

Community animal

Natural behaviours

Territorial, prefer to live in marked territory, have social hierarchies

Abandoned animals are often solitary and wander

Form groups near food and shelter

Limited resources

Space

Cramped living conditions, infrastructure and crowds in cities have brought humans and community animals in proximity. Finding space in unfamiliar in this mix contributes to the suffering of community animals.[22]

Food

Unless community animals are regularly fed, they are forced to scavenge for leftover food in garbage dumps – often injuring themselves or choking while foraging through broken glass, plastic, and other hazardous waste.

Vulnerabilities

Malnutrition, hunger and thirst

Community animals rely on waste and leftovers for food – often not nutritive in the first place; where community animals do not have access to either, especially in rural areas, they often starve. Malnutrition weakens their immune systems and makes them vulnerable to illness.

Diseases

Dogs and cats are susceptible to diseases like rabies, parvovirus, and distemper. Stray cattle can carry zoonotic pathogens, like Mycobacterium and Brucella species, and deadly viral infections like Lumpy Skin Disease, due to poor diet and immunity, compared to domesticated cattle.[23] They also spread the infection faster because they are seldom quarantined and roam freely.

Animal- vehicle collisions

Animal-vehicle collisions present a serious threat to stray animals in India, leading to injuries or fatalities due to increased road traffic.

" *In Mooradev, at least 150 abandoned cows and bulls roam the streets, damaging multiple crops and attacking and injuring children. About 300 km to the west, at Mahui in Bundelkhand, villagers have a roster for night guard duties and have built watch towers (machaans) to keep an eye on stray cattle. "Just one chance will be enough for the cattle to destroy my entire crop," says Malkhe Shrevaas, a farmer from Mahui.*

–What made rural India abandon its cattle in droves (2019), Economic Times[27]
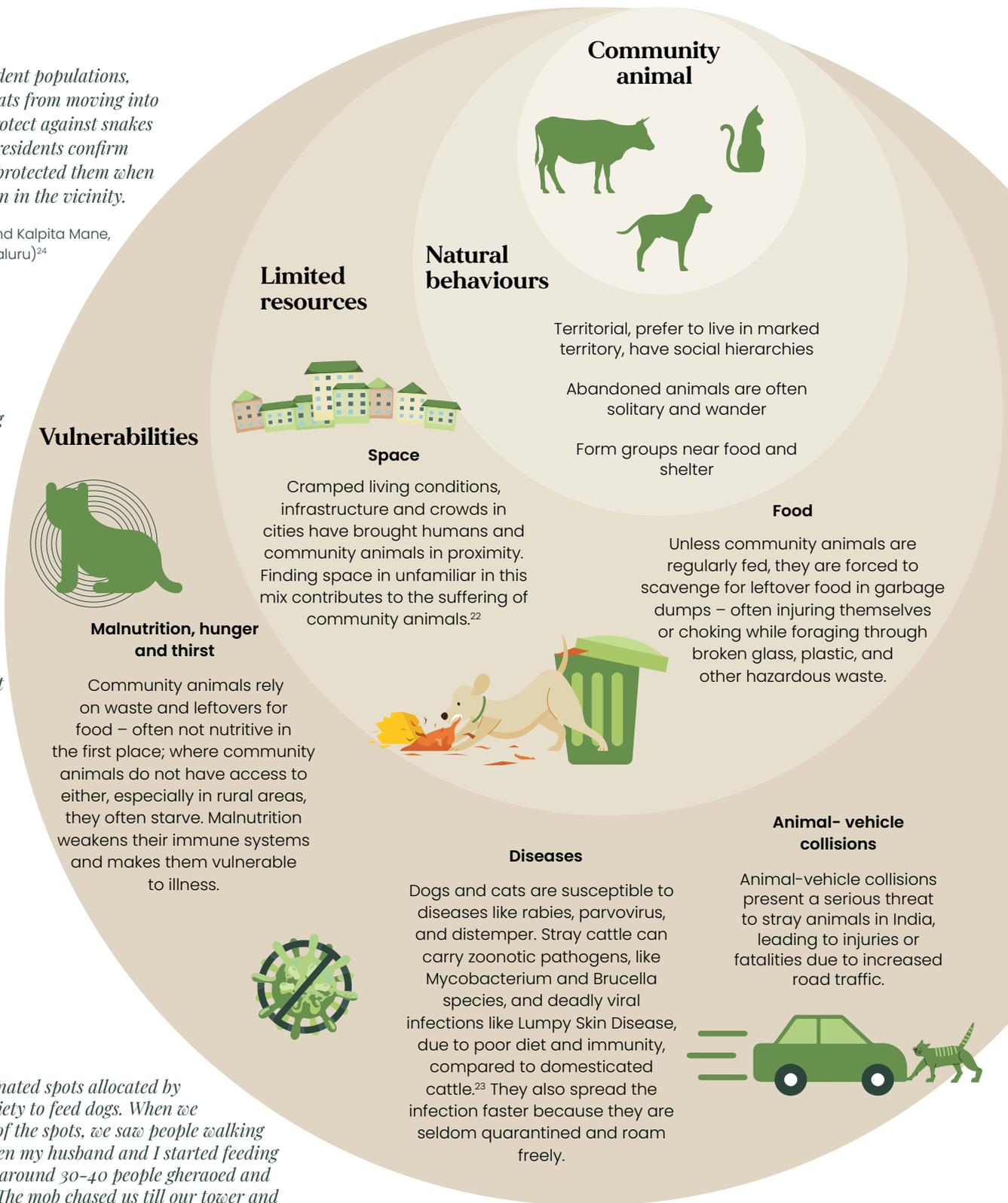
Cascading Effects

How does animal suffering on community animals cascade into human and environmental challenges?

Towards safe, cohesive communities: Building systems to solve issues of community animals in a manner which is scientific, compassionate, and sustainable is in the greatest human interest, as it intersects with collective public welfare in multiple ways.

> *Cows we cannot protect, dogs we kick about and belabour with sticks, their ribs are seen sticking out... It is an insult to the starving dog to throw a crumb at him. Roving dogs do not indicate compassion and civilization in society; they betray instead the ignorance and lethargy of its members. It is my firm conviction that this sorry plight is due to our misconception of ahimsa, is due to our want of ahimsa. Practice of ahimsa cannot have as its result impotence, impoverishment and famine.*

–M.K. Gandhi, Young India (1926)

Public Health

Zoonotic Diseases

The primary risk to public health from community animals is the spread of diseases, particularly rabies. In 2005 the WHO found the number of rabies cases in India to be approximately 20,000.[30] More recent statistics from government sources have indicated a significant fall in cases to only 307 in 2022.[31]

Physical Injury

The National Rabies Control Programme, overseen by the National Centre for Disease Control, has observed a significant decrease in the number of dog bite cases, from 7.5 million in 2018 to 2.75 million incidents in 2023.[32] This indicates a generally positive trend. However, there has been an increase in the incidence of bites, from 2.18 million incidents in 2022 to 2.75 million in 2023, which many vets attribute to worsening implementation of the ABC programme over the last few years.[33]

Animal Cruelty, Mental Health, and Human Violence

Studies have found a deep connection between personality disorders, recurrent animal cruelty and recurrent interpersonal violence.[34] Murder, robbery, assault, rape, harassment, threats and drug possession are crimes associated with a history of animal abuse.[35] Over the past few years in India, there has been an increase in animal abuse, where predominant targets of violence have been stray animals.[36] When animal cruelty is not effectively stopped or ignored in the case of stray animals, it can lead to desensitisation to violence, or embolden perpetrators to believe they can be abusive without consequence, when their acts of violence against animals remain unpunished.[37,38]

Social Conflict

Waste management

The population of stray dogs is directly proportionate to the amount of food waste available on streets and open dumpsters in India.[39] This problem is further exacerbated in places like slums and informal settlements where the lack of space and waste disposal leads to many territorial animals in close quarters with each other and humans, which can further exacerbate human-animal conflict.

Social disintegration

Low awareness and antagonism have caused significant rifts between animal rescuers/ feeders and resident welfare associations. Often, animal carers, feeders and rescuers have faced violence and abuse. Repeated judgements and circulars have called for the protection of and cooperation with animal feeders,[40] but lack of co-operation between RWAs, residents and government bodies have led to continued rising tensions.[41,42,43]

Securing animal welfare through clear guidelines, law enforcement, and the inoculation of community animals is in the greatest interest of community harmony.

Road Safety

Animal-Vehicle Collisions

Accidents involving stray animals on roads create a cascading effect, endangering animals, drivers, and pedestrians.

Inadequate care to incorporate animal friendly infrastructure has also contributed to traffic risks and injuries for humans.

Out of all animal-specific road accidents, dogs caused 58% of them, generally at roadway crossings, followed by cattle at 25.4%.[44]

These accidents have led to disproportionately high mortality in animals exemplified by the alarming statistics reported in Nagpur from 2012 to July 2019. 11,915 stray animals suffered injuries in road accidents in a single city.[45]

World Animal Protection, an NGO working for the relief of community animals, estimated that 1.5 million community animals succumb to road accidents every year.[46]

Success Stories

How multiple stakeholders are coming together to address community animal welfare in conjunction with health, social conflict and road safety

Though these issues seem overwhelming, each of them can be mitigated through enhanced animal welfare mechanisms, including incremental steps for each stakeholder group.

Comprehensive care for community animals | Raksha Foundation

Raksha Foundation is a non-profit organization dedicated to improving the lives of community animals in Mumbai, India. With a focus on providing medical treatment, rehabilitation, and educational programs, the foundation aims to address the challenges faced by community animals and promote coexistence within communities.

Interventions

Emergency Surgeries: The foundation conducts emergency surgeries to address injuries, illnesses, and instances of abuse suffered by community animals, ensuring they receive prompt and necessary medical care.

Rehabilitation and Adoption: Raksha Foundation actively participates in the rehabilitation and adoption of abandoned dogs, providing them with a chance for a better life in loving homes.

Animal Birth Control Operations: In collaboration with the government, the foundation conducts animal birth control operations to control the population of community dogs and cats and prevent further breeding.

Educational Programs: Sensitization and awareness sessions are conducted in schools to educate students about animal welfare issues and promote humane interactions with community animals.

Impact

Successful Surgeries: Over the past two years, Raksha Foundation has completed more than 100 surgeries for dogs, addressing conditions such as cancers, orthopaedic issues, and hernias, thereby improving the health and well-being of these animals.

Population Control: The foundation has performed approximately 1600 animal birth control procedures on community dogs in Mumbai, contributing to efforts to manage the community animal population and reduce instances of overbreeding.

Community Engagement: hrough community rallies and awareness campaigns, Raksha Foundation has empowered students and residents to advocate for the welfare of community animals, fostering a culture of compassion and coexistence.

Key takeaway

Raksha Foundation's approach of combining medical intervention, population control measures, and educational initiatives, not only addresses immediate challenges faced by community animals but also promotes long-term awareness and community engagement for building a more compassionate society towards animals.

Rehabilitation for community cats |
Feline Foundation

The Feline Foundation works to enhance the lives of stray cats in Mumbai through medical care, nourishment, population control, and community involvement. They provide emergency medical aid to injured and sick cats, conduct spay/neuter drives to reduce their growing population, and raise awareness of their plight through educational campaigns and community involvement. They also run a low-cost outpatient veterinary clinic that caters to all dogs and cats in need.

Interventions

Community Veterinary Clinic: The Community Veterinary Clinic is a nonprofit vet clinic that provides quality medical care at low costs to stray/pet dogs and cats in Mumbai.

Rehabilitation Program: The Feline Foundation admits at-risk cats into their inpatient program where their expert veterinarians provide them with specialized care until they are deemed fit for release or adoption. As a part of this program, they also perform major surgeries, including amputations, eye excisions, hernia repairs, flap surgeries, and orthopedic procedures, within its facilities to address the medical needs of animals under rehabilitation.

Sterilization Program: The Feline Foundation implements a successful Sterilization Program which aims to address the overpopulation crisis among stray cats through mass sterilization drives, targeted interventions, and community engagement efforts.

Collaboration with Adoption Partners: The foundation collaborates with Cat Cafe as an adoption implementation partner, particularly for animals with disabilities or those too young or old for street life, ensuring a seamless transition from rehabilitation to adoption.

Impact

Community Veterinary Clinic: The Community Veterinary Clinic treats between 25-50 patients per day of operation, which amounts to 700-900 animals per month. To date, the clinic has treated over 29,000 dogs and cats since its inception.

Rehabilitation Program: The program admits 25-30 new at-risk stray cats per month with a total ward capacity of 21 cages. They have an outcome of over 86% of cases who have been successfully released to their territories or, if disabled/ need additional care, to loving adoptive homes. To date, they have saved over 1900 at-risk stray cats and conducted over 300 major surgeries as a part of this program.

Sterilization Program: With a monthly capacity of 400 surgeries, to date, their sterilization program has sterilised over 8700 cats.

Collaboration with Adoption Partners: To date, with their adoption implementation partner Cat Café Studio, they have found adoptive homes for over 1500 cats.

Key takeaway

The Feline Foundation's comprehensive approach, which includes a Community Veterinary Clinic, a Rehabilitation Program, a Sterilization Program, and collaboration with adoption partners like Cat Café Studio, effectively addresses the critical needs of stray cats in Mumbai. By providing medical care, managing overpopulation, and ensuring responsible adoption, the foundation significantly improves the welfare of stray cats, offering them a more secure and healthy future.

Assessing animal needs on the ground |
India Animal Fund

When a donor wishes to invest in rescue and rehabilitation infrastructure in a district, a preliminary step often includes conducting a needs assessment. Such an evaluation looks at the organizations currently operating in the region, the kinds of services they are providing, the effectiveness of their work, their capacity to handle the load and ultimately identifies the most immediate areas that need to improve animal welfare in the district.

India Animal Fund (IAF) conducts a comprehensive needs assessment prior to entering a specific jurisdiction. Such an assessment, which is completed using a mix of detailed primary and secondary research, typically includes:

1 An analysis of strengths, opportunities, weaknesses and threats (SWOT), for a specific subdivision of the jurisdiction

2 The number of animal-welfare-focused organizations operating currently within the subdivision

3 The availability of infrastructure, like number of in-patient kennels, pathology and radiology machines, rescue vehicles and ambulances, and the number of medical staff such as vets and paravets

4 The number of animals that organizations within the subdivision have the capacity to care for at a given time

5 The number of vans and ambulances operating in the subdivision, and the hours of operation of such ambulances

6 The number of distress calls and the number of cases attended to by the subdivision's organizations each day/month, response rate, and types of cases attended to

IAF then identifies and summarizes where efforts could be bolstered. This ensures that the organization is not creating overlapping services, and that every rupee it will spend in the region is dedicated to the subdivision and the cause that needs it most. In this way, IAF helps to channel donor funds into the areas that need it the most.

The needs assessment for Mumbai, for example, looked at the specific subdivisions of Navi Mumbai, Mumbai's Western and Eastern suburbs. After researching a number of organisations working with street animals, including In Defence of Animals, YODA, and World For All, the assessment presents a number of recommendations on how IAF can enter the region, such as augmenting infrastructure, partnering with other credible organisations, selecting a niche, providing community awareness programs and ensuring an enhancement in the capacity of a sub division.

The Way Forward: a roadmap for community animal welfare in India

"

Every journey starts with a single step towards compassion. Whether it's rescuing animals or standing up against cruelty, the pure intention to alleviate suffering can move mountains. Let's educate, sensitize, and act with unwavering honesty. In this shared world, every living being deserves freedom from torture and the right to live with peace.

–Timmie Kumar, Chairperson and Trustee, Help in Suffering

Law enforcement and policy reform

Ensuring consistent and complete law enforcement is crucial for the welfare of community animals

1 Managing populations
Using the one health approach, India can effectively control its stray animal population through effective birth control programs like Animal Birth Control (ABC) programs, and Trap Neuter Release (TNR), and significantly reduce the incidences of rabies.

2 Cracking down on animal cruelty
To reduce abuse against both animals and humans, we must take prosecution of cases of animal cruelty and violence more seriously. The punishment or fine under anti-cruelty legislation like the Prevention of Cruelty to Animals Act, must be increased to act as a more effective deterrent. It must also be ensured that the bodies prescribed for the implementation of these laws are both in existence and functional.

3 Establishing functional SPCAs and State AWBI and funding them
Societies for Prevention of Cruelty to Animals (SPCAs) and State Animal Welfare Boards (AWBIs) are crucial for enforcing animal protection laws and managing human-animal conflict. Establishing operational SPCAs in each district and adequately resourcing State Animal Welfare Boards is essential. Despite a Supreme Court directive in 2008, several states still lack functional AWBIs, largely due to funding shortages hindering their effectiveness.[47]

4 Maintaining a Centralized Community Animal Data Repository (CCADR)
This is aimed at addressing the absence of consolidated information regarding the number of community animals living on the streets present in the state.

5 Capacity building, and sensitisation programs for Urban Local Bodies
Success of policies like the ABC Rules, 2023 relies heavily on inexperienced local bodies and authorities, necessitating sensitization programs to equip practitioners with sector-specific knowledge for effective implementation.

6 Capacity building, and sensitisation programs for Urban Local Bodies
Requiring all breeders to obtain licenses and register their operations would regulate the industry, ensuring compliance with animal welfare standards and discouraging illegal breeding practices.

Infrastructure for animal welfare

Counting in community animals as stakeholders of infrastructure and built environments helps us build better, safer, and more sustainably

1 Scaling model districts
This involves establishing model districts for animal welfare, which include setting up monitoring committees, mobile clinics, training government officers, developing and implementing infrastructure and systems mandated by law

2 Revitalising animal-friendly architecture practices
There is value in bringing back ancient architectural and urban planning features which accounted for animals – like "chabutras" or public bird houses, and safe, accessible shelters for community animals during monsoon and adverse weather conditions.[48]

3 Mitigation for animal-vehicle collisions
Enforce and enhance traffic laws that prioritize the safety of community animals, including designated animal-crossing zones and speed limits.

4 Scaling emergency care facilities for injured animals
Ramping up animal ambulance and rescue fleets and introducing more animal hospitals in areas with a high number of community animals. This will also help in ensuring disaster relief for animals.

Awareness, knowledge, and empathy

Fostering a shared trusteeship within the community to ensure the coexistence of humans and animals.

1 Organising public awareness campaigns
Community events, workshops, and educational sessions on animal welfare are vital for raising public awareness, as they educate people on topics like dog bite care and rabies protocols, benefiting both humans and animals. Citizen and Resident Welfare Associations should also be made aware of their rights and responsibilities regarding community animals and their caregivers

2 Mobilising community champions
Cities should implement conventional spay/neuter surgeries for dogs and cats with intensified community involvement. While clinic staff administer surgeries and oversee post-operative care, a dedicated public engagement team interacts with community members, addressing their concerns and promoting harmonious cohabitation with dogs and cats. Scaling this model can effectively manage the population of dogs and cats while improving community relations regarding animal welfare

3 Educating people about the benefits of positive human-animal interaction
Promote education and adoption to showcase animals' positive impact on human mental health, emphasizing animal-assisted therapy's benefits for psychiatric illness, elderly, and pregnant women. Increased human-animal interactions have been proven to reduce stress, fear, anxiety, and depressive symptoms while promoting calmness in social interactions.[49]

> "
> *Through compassionate care and humane practices, we strive to alleviate the suffering caused by overpopulation. Sterilization isn't just about controlling population; it's about preventing countless lives from enduring suffering on the streets. By focusing on sterilization and nurturing injured animals back to health, we create a safer and more sustainable environment for both animals and humans.*

-Ajeet Doshi, Executive Director, Raksha Foundation

The Way Forward for Animal Welfare in India

Cornerstones For Change: Four Key Pillars

In order to foster sustainable and enhanced animal welfare, the focus must be on laying the foundation on four key pillars:

Awareness **Capital** **Talent** **Policymaking**

1. Awareness

Cultivating a contextual understanding of animal welfare, and the catalytic role humans can play by coming together at the individual, community, and organisational levels.

1. Knowledge of the various ways in which animals become part of intensive systems
2. Awareness on the connotation of animal welfare across diverse contexts in India
3. Frameworks of welfare through evidence, logic and science
4. Integration of an animal welfare lens in our thinking and consumption practices
5. Greater kinship and empathy for animals as sentient beings, and the intersections between animal and human wellbeing

> *True animal welfare isn't a label for the compassionate few, it's a call to action for all. It's not about loving animals; it's about respecting life and ensuring a sustainable future for all beings. We must shift from sentiment to systemic change, from rescue to regulation, for the well-being of animals, humans, and the planet.*

–Gauri Maulekhi, Trustee, People for Animals

> *We are underestimating the power or the need for human behaviour change when we look at animals. Children are being taught to not go near dogs but children are not being taught how to co-exist with animals, there is an othering that is happening in households.*

–Bharati Ramachandran, Chief Executive Officer, FIAPO

2. Capital

Increasing strategic and targeted financial support towards organized and intersectoral animal welfare research, programs, and practitioners, as well as supporting research, innovation an uptake of alternatives to replace animal usage.

1. Building capacities for sector practitioners to improve animal welfare on the ground
2. Identification and increased financial support of on-ground partners for animal welfare initiatives
3. Facilitation of collaborations between academia, industry, and government to drive progress in animal welfare
4. Acceleration of the adoption of cruelty-free practices through technological innovations
5. Strengthening the economic case for investing in animal welfare by demonstrating its interlinkages with the sustainable development goals

“

Farmed animal advocacy in India is absolutely critical given the huge number of animals being confined and slaughtered there. However, the number of farmed animal advocacy organisations is absolutely tiny compared to the scale of the challenge, and we greatly hope to see increased support and funding for the Indian animal advocacy movement so that it can fulfil its enormous potential.

-Max Taylor, Researcher, Animal Charity Evaluator

“

Animal welfare organizations face a significant deficit in startup funds, with many founders initially financing ventures from their personal resources. The inherent challenge lies in the non-mainstream appeal of the animal welfare sector, making it very difficult to secure initial funding. Frequently, NGOs rely on personal contributions and sporadic support from small individual donors. The lack of corporate mandates prioritizing animal welfare increases funding difficulties, contributing to the reliance on personal investments for extended periods.

-Charu Khosla, Chairperson, Feline Foundation

3. Talent

Encouraging animal welfare careers among the youth in urban and rural India, and regular capacity-building and support for those already practising in the sector.

1. Specialized knowledge and skills to address complex challenges in animal welfare
2. Increased diversity and inclusivity within the animal welfare workforce
3. Enhanced career pathways and opportunities for young professionals passionate about animal welfare
4. Strengthened networks and collaborations among animal welfare practitioners and organizations
5. Continuous learning and professional development opportunities to stay abreast of evolving best practices and innovations.

“

I believe that there are a large number of people who wish to have a world where humans co-exist with the animals, and we ensure a life of dignity to all the animals. It is crucial to attract talent to the movement – it is the energy and compassion of the youth that will generate the force for good. Ahimsa fellowship program was inspired by the success of Teach for India and the Gandhi Fellowship, and has already created 50 leaders. Over the next few years, we aim to create 500+ leaders and incubate several new organizations to solve problems in the movement.

-Parag Agarwal, Chief Financial Officer, Dr. Reddy

“

The unprecedented scale and extent of animal suffering is in large part due to the lack of awareness of consumers. People are intrinsically compassionate and when given the right information and alternatives, will make the switch to more humane products and services. Awareness and alternatives is therefore one of the most important areas for the animal protection sector to invest in.

-Sandeep Reddy, Chief Operating Officer, India Animal Fund

4. Policymaking

Bringing thoughtful, scientific, and inclusive policy reform and implementation in consonance with on-ground realities in India

1. Incorporating scientific evidence, ground realities, and expert input into the policymaking process
2. Ensuring representation and participation of diverse stakeholders in policy discussions
3. Addressing systemic barriers and inequities that impact animal welfare outcomes
4. Enacting and enforcing stricter laws and robust monitoring mechanisms to uphold animal welfare standards
5. Promoting transparency and accountability in policymaking processes to build public trust and confidence

"

In our pursuit of ethical practices and a sustainable future, we stand firm against the exploitation of animals in experiments. Our commitment to cruelty-free standards isn't just a choice; it's a reflection of our values and responsibility towards animal welfare and environmental preservation. By embracing innovation and advocating for humane practices, we strive to pave the way for a compassionate and ethical industry standard, one that respects the inherent dignity of all living beings.

–Bare Necessities

"

Welfare is only one thing- it is the concept of One Health. One health means if the plants are healthy, if the animals are healthy, you will be healthy. Damage to the animals will cause damage to you. For example, if an antibiotic is overused in animals and stops working on animals, the same antibiotic also will not work for humans.

–Dr Syed Fareh-uz Zaman, Head of Region, Brooke India

A ROADMAP FOR CHANGEMAKERS: COLLABORATION AND TRUSTEESHIP

Influential stakeholders must come together to secure Animal Welfare, Human Wellbeing and Sustainability in India

Non-profits, civil society groups, and think tanks anchor a range of interventions for animal welfare in India, building holistic and long-term impact – however, these interventions need the involvement of various stakeholders to scale up.

> "
> *In recent years, significant progress has been observed in collaborative building; however, there remains work to be accomplished. NGOs are just not doing things in a vacuum and in silos; instead, are fostering collaboration and coordination. Recognizing that each group possesses its unique strengths and weaknesses and acknowledging the diversity in defining or perceiving animal welfare, it is crucial to unite efforts. No matter how differently we define or perceive animal welfare, at the end of the day we have the same goal.*
>
> *–Harshdeep Singh, Open Philanthropy*

How influential stakeholders can come together to bolster animal welfare in India

Anchor	Action	Collaborators
Funders	Funding is critical in promoting animal welfare by addressing both immediate needs and a long-term strategy. While the recommendations below are not exhaustive, distinct roles for funders indicate unique value propositions for their specific contexts. • **Corporate Funders:** Invest corporate funds actively towards improving animal welfare by supporting catalytic intersectoral solutions such as research on alternative proteins and non-animal methods for drug development to create long-term transformational change. • **Institutional Funders:** Play a pivotal role by anchoring multi-stakeholder dialogues, collaboratives and pooled funding that promote cross-disciplinary efforts to address systemic breakpoints. • **Individual Philanthropists:** Provide resources for essential capacities in animal welfare, by supporting animal healthcare infrastructure and access, increased multidisciplinary research, initiatives to attract talent and build capacity through workshops, and fellowships to catalyse positive change.	Non-profits Workers* Academic & Research Institutions Government Corporates
Corporates	• Integrating an animal welfare lens into organisational sustainability goals. • Implementing ethical practices throughout supply chains, with special attention to animal welfare best practices and standards. • Extending welfare measures to all workers and animals in their ecosystem through an inclusive approach. • Funding interventions at the intersections of animal welfare, public health, climate change, and worker wellbeing.	Non-profits Workers Government Service industry and allied organisations

Workers here mean people who work closely with animals, and whose livelihoods are strongly connected to animal use

Anchor	Action	Collaborators
Non-profits	• Establishing an inclusive and India-specific narrative of animal welfare. • Collecting data by conducting India-specific, contextual research and documentation. • Collaborating with organisations across animal welfare issues, geographies, and sectors to broaden the animal welfare lens and amplify impact. • Advocating for policy reform through ground-up recommendations and encouraging the enforcement of current laws.	Funders Advocacy groups Non-profits Media Government Multilaterals Sector experts Academic & Research Institutions Vets
Government	• Incentivising and supporting producer groups, including corporates and farmers, to transition towards higher welfare systems such as cage free eggs, etc. • Incentivising and supporting farmers engaged in animal husbandry to transition into producing alternative agricultural products. • Creating a positive regulatory landscape for start-ups, investors and companies to innovate and develop more alternative proteins and non-animal methods for research and drug development. • Promoting inclusive policy, filling the lacunae in the law and ensuring that the externalities of animal use on animal welfare, public health, the environment and human welfare are internalised to the respective industries. • Creating minimum specie specific standards for the rearing and maintenance of animals used for human gain. • Increasing the penalties under the current anti-cruelty laws and enforcing animal protection laws and allied laws like food safety and environmental laws. • Functioning SPCA's should be established in all districts by the respective state government, in accordance with current Indian law.	Farmers and pastoralists Workers Academic and Research Institutions Non-profits Citizens Urban Planners and Architects Vets
Citizens	**At the individual level:** Adopting incremental practices towards welfare by: -Making kinder, informed and sustainable consumption decisions. -Reporting instances of violence against animals to appropriate authorities. **At the community level:** Residential Society Welfare Associations (RWAs) should work with local animal caretakers to secure basic welfare for community animals. **At the state level:** Driving accountability from and support local authorities.	Educational and Research Institutions Non-profits Civil Society Groups Residential Society Welfare Associations Government Vets Students

Ultimate harmony and resilience: Animal welfare provides changemakers the opportunity to push their boundaries of compassion and collaboration

Investing in animal welfare in India can prove to be a visionary step towards holistic development, progress and sustainability. By channelling funds, networks and collaboration towards animal welfare initiatives, we not only ensure their welfare but also create shared prosperity for human communities.

Annexure 1: Preliminary landscape of the sector

Based on our preliminary landscaping of the sector – we have highlighted 11 non-profits with an interlinked focus on the farmed animals, working animals, community animals, and animals used in testing and experimentation in India.

The mapping undertaken in this table is indicative, and not exhaustive. To see a more detailed listing of the landscape of actors – please see Annexure 2.

Name	Budget (INR)	FCRA	80G	12A	Areas of Work in Animal Welfare
Bombay Natural History Society (BNHS)	3,94,27,840	Yes	Yes	Yes	BHNS undertakes activities towards conservation of nature and improving biological diversity through action based on research, education and training as well as, public awareness.
Brooke India	22,51,79,161	No	Yes	Yes	Brooke India addresses the needs of working equids and their owners by improving equine health and addressing requirements of financial capability, sensitization, and training among equine owners to adopt appropriate animal management and welfare practices.
Feline Foundation	231,00,000	No	Yes	Yes	Feline Foundation enhances the lives of stray cats in Mumbai through population management, medical care, nourishment, rehabilitation, adoption, education, awareness, and community involvement.
FIAPO	~3,00,00,000	Yes	Yes	Yes	FIAPO, a collaborative effort involving over 80 member organizations and 200 supporters across 40 cities in India, aims to advocate for animals' rights through education, research, lobbying, mobilization, training, and direct action.
GFI India	8,30,00,000	under process	Yes	Yes	GFI India is dedicated to on building talent pools, investigating key research areas, facilitating technology transfer to the market, and nurturing the next generation of smart protein innovations.
Help in Suffering	4,75,00,000	Yes	Yes	Yes	HIS provides free, quality emergency medical and surgical care while conducting Animal Birth Control & inoculation programs for community and domesticated animals.
Humane Society International (HSI) India	1,52,194,390	Yes	Yes	Yes	Humane Society International/India is a leading organization for animal protection, campaigning against factory farming and animal testing, working to protect wildlife and street animals, and helping animals in cruelty situations and in the aftermath of disasters
People for Animals (PFA)	~6,00,00,000	Yes	Under process	Yes	People for Animals, PFA, is India's largest Non-Governmental Animal Welfare Organization working to rescue and rehabilitate animals through medical care, sterilization programs, disaster rescue missions as well as conduct education programs in schools and advocate for animal issues in parliament.
Raksha Foundation	1,30,00,000	No	Yes	Yes	Raksha Foundation undertakes population management, nourishment, medical care, rehabilitation and adoption for community dogs and cats in Mumbai as well as conduct awareness of animal care through educational initiatives for students in marginalized communities.

Sahjeevan, Center for Pastoralism	10,45,74,940	Yes	Yes	Yes	CfP has established collaborative programs across India aimed at enhancing pastoral livelihood security, securing access to grazing resources, promoting the contributions of pastoralism to the country's socioeconomic and cultural front through outreach, and improving understanding of pastoralism through research.
Samayu	3,00,00,000	No	Yes	Yes	Samayu takes systems change approach to enable a transition to plant-forward and sustainable food systems through engagement with policy, consumers and the industry.

Annexure 2

Action Landscape

S. No.	Name	Organization Type	Website
1	Ahimsa Trust	Funder/Collective	https://ahimsatrust.in/about-us/
2	Animal Aid Unlimited	NGO	https://www.animalaidunlimited.org/
3	Animal Equality India	NGO	https://animalequality.in/
4	Animals Matter To Me	NGO	https://www.amtmindia.org/about/
5	Ashoka Trust for Research in Ecology & the Environment	Academia/Think-Tank	https://www.atree.org/
6	Asia for Animals Coalition	Collective	https://www.asiaforanimals.com/
7	Blue Cross of India	NGO	https://bluecrossofindia.org/
8	Body Shop	Corporates	https://www.thebodyshop.in/
9	Bombay Natural History Society (BNHS)	Academia/Think-Tank	https://www.bnhs.org/home-page
10	Brooke India	NGO	https://www.thebrooke.org/our-work/india
11	Centre for Pastoralism	NGO	https://centreforpastoralism.org/
12	Centre for Predictive Human Model Systems	Academia/Think-Tank	https://aic.ccmb.res.in/cphms/
13	Compassion Unlimited Plus Action (CUPA)	NGO	https://cupabangalore.org/
14	Environmentalist Foundation of India	NGO	https://indiaenvironment.org/our-projects/
15	FIAPO (Federation of Indian Animal Protection Organizations)	Collective	https://www.fiapo.org/fiaporg/
16	Friendicoes	NGO	https://friendicoes.org/
17	Good Dot	Corporate	https://gooddot.in/

18	Help in Suffering	NGO	https://helpinsuffering.org/
19	Humane Society International	NGO	https://www.hsi.org/
20	In Defense of Animals	NGO	https://www.idaindia.org/
21	Karuna Society for Animals and Nature	NGO	https://karunasociety.org/
22	Marine life of Mumbai	NGO	https://www.marinelifeofmumbai.in/
23	Mercy For Animals	NGO	https://mercyforanimals.in/about/
24	Open Philanthropy	Funder institution	https://www.openphilanthropy.org/focus/farm-animal-welfare/
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26	People for Animals India	NGO	https://www.peopleforanimalsindia.org/
27	PETA	NGO	https://www.petaindia.com/
28	Physicians Committee for Responsible Medicine	Academia/Think-Tank	https://www.pcrm.org/
29	Raksha Foundation	NGO	https://www.raksha.love/
30	Samayu	NGO	https://samayu.org/
31	Stray Relief and Animal Welfare (STRAW)	NGO	https://strawindia.org/compassionate-classrooms.aspx
32	The Brooks Institute	Academia/Think-Tank	https://thebrooksinstitute.org/
33	GFI India	Academia/Think-Tank	https://gfi-india.org/
34	Vegan Outreach India	NGO	https://veganoutreach.org/
35	Veganuary	NGO	https://veganuary.com/en-in/about/about-us/
36	Visakha Society for Protection and Care of Animals	NGO	https://vspca.org/
37	Welfare of Stray Dogs	NGO	https://www.wsdindia.org/
38	Wildlife SOS	NGO	https://wildlifesos.org/about-us/history/
39	Wildlife trust of India	NGO	https://www.wti.org.in/our-story/
40	World Animal Protection India	NGO	https://www.worldanimalprotection.org.in/

Annexure 3

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S. No.	Name	Organization
1	Abhishek Sinha	Good Dot
2	Ajeet Doshi	Raksha Foundation
3	Alokparna Sengupta	Humane Society International, India
4	Antara Kundu	The Body Shop
5	Astha Gaur	Good Food Institute, India
6	Bharati Ramachandran	Federation of Indian Animal Protection Organisations (FAIPO)
7	Brinda Upadhyaya	Upadhayay Foundation
8	Charu Khosla	Feline Foundation
9	Deepak Sapra	Dr. Reddy's Laboratories
10	Gauri Maulekhi	People for Animals
11	Harshdeep Singh	Open Philanthropy
12	Jayasimha Nuggehalli	Global Food Partners
13	Karan Bajaj	Eat with Better
14	Kasturi Mahadik	Centre for Cellular and Molecular Biology
15	Kazveen Umrigar	Bombay Natural History Society
16	Mansi Virmani	Good Food Institute, India
17	Max Taylor	Animal Charity Evaluators
18	Pallavi Kamath	Feline Foundation
19	Priya Pandey	Brooke India
20	Ritika Verma	The Body Shop
21	S.F. Zaman	Brooke India
22	Sandeep Virmani	Sahjeevan
23	Sonia Shad	National Academy of Legal Studies & Research (NALSAR) University
24	Surat Parvatam	Humane Society International, India
25	Sushma Iyengar	Kutch Mahila Vikas Sangthan
26	Timmie Kumar	Help in Suffering
27	Uttara Kennedy	RSPCA, Queensland
28	Varda Mehrotra	Samayu

Endnotes

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