Business Case

For Higher Dairy Welfare
The Indian dairy sector is rapidly increasing with a National goal to double production by 2025. Animals in good welfare produce more and better quality milk, reducing the need for antibiotics and additives, and benefiting consumers, farmers and businesses. Together with National Dairy Research Institute, World Animal Protection developed the National Code for of Practice for Dairy Management in India to detail good basic health, welfare and management standards. This Code is endorsed by the Animal Welfare Board of India.

Consumers expect responsible sourcing and businesses are expected to comply with these standards, which are conveniently condensed to five Minimum Basic Welfare Requirements. Case studies from existing Indian commercial farmers are detailed to showcase that higher welfare is good for their animals, business and consumers. Higher welfare is everyone’s business – do your dairy products meet these basic welfare requirements?
The importance of animal welfare across supply chains is evident internationally as seen in the global Business Benchmark for Animal Welfare which covers more than 100 of the largest food companies, including Fonterra, Nestle and Groupe Danone. Retailers, restaurant chains and producers are committing to improved welfare as demand from consumers grows and investors speculate on risk. Higher welfare is good for dairy business and production, milk quality, public health and safety; crucial in India as the world’s largest milk producer. Kwality is the first Indian dairy company to commit (2017) to implementing **Minimum Basic Welfare Requirements** which align also with the National Code of Practice for Management of Dairy Animals in India. They require all animals in the supply chain have:

24 hour access to clean water and good quality feed

Access to suitable shade / shelter and comfortable resting

Access to preventative health care for all animals and all calves receive adequate colostrum and care

No permanent tethering or caging and suitable outdoor access

Good animal handling and a humane plan to manage unwanted animals

The demand for higher quality milk is increasing in India and milk production is set to double by 2025. However, the industry faces several inherent challenges including low milk yield and excessive antibiotic use. Poor welfare is an underlying barrier to better production and milk quality. Dairy animals that are restricted in movement, behaviour, feed, water, health, poor housing and handling do not produce well and risk higher levels of illness and excessive use of antibiotics. However, solutions are afoot and the market and supply is gradually changing. Around 70% of dairy supply is from smallholders, and the number of cattle they own is increasing. Innovative farmers are evolving with systems that provide the basic needs of their animals, facilitate more efficient production and supply the loose or packaged milk market. These business owners are employing farm systems that meet minimum welfare needs and reap the benefits for their animals, staff, customers and business. And where conventional retailers do not meet their needs, they are directly supplying to consumers.

This business case presents some leading Indian dairy producers who convey how incorporating **Minimum Basic Welfare Requirements** has facilitated improved production, direct market access and higher returns. Many of these aspects can also apply to rural smallholder farmers, improving their livelihoods and income in a locally relevant way to provide better quality of milk for rural and urban consumers.

1 www.bbfaw.com
Note: “We have worked with Kwality in the past but are not at this point in time”.
Whatever their preferred milk format, Indian consumers predominantly select their milk on the basis of perceived product safety, quality and convenience. Animal welfare is related to all these attributes whereby poor welfare can impact negatively and good welfare can positively impact milk safety, quality and quantity.

In India dairy animals (cows and buffalos) are usually permanently tethered, often on dirty, hard floors and permanently indoors or without shade or shelter. They cannot perform a basic range of normal behaviours such as turn around, graze, lie comfortably or alone choose their location, graze, wallow or socialise. They experience hunger, thirst, pain, discomfort, fear, heat and cold stress. While this applies to a large proportion of dairy animals in India, the urban and peri-urban dairy animals suffer the worst cruelty. With increasing land and urban pressures, these farms are increasingly reduced to the worst husbandry and routine abuse. These animals have no ability to move, are kept continuously in cramped, dark housing, often with restricted access to dirty water, and a general lack of health care.

All these factors contribute to higher levels of mastitis, reproductive infections, lameness, body sores, reduced fertility and a range of abnormal behaviours. The animals are chronically stressed and deprived of their basic needs, reducing their immunity and predisposing them to disease, excessive and irresponsible use of antibiotics. This is not a life worth living for these dairy animals nor a pathway to improved Indian milk production.

Indian milk consumers are also directly concerned with animal welfare. World Animal Protection India, commissioned a consumer survey in 6 major Indian cities in 2016.

Key findings are below:

- Almost 90% of respondents care about the treatment of dairy cattle and agreed that dairies should consider animal welfare.
- When made aware of the common welfare conditions, nearly 90% were more likely to buy dairy products from a company that source from dairies adopting better animal welfare practices.
- 75% are willing to pay more for products that come from dairies offering better welfare.
- Overwhelmingly (80 to 96%) respondents thought that animal welfare practices in peri-urban/urban dairies were unacceptable.

The next sections will case study practical dairy business opportunities and benefits in India that minimum welfare requirements convey. The farms were assessed and farmers were interviewed. Animals are well fed, have constant access to clean water, shelter, dry, clean, comfortable lying areas and regular health care starting from calves. They live a life with lower levels of stress and pain while disease, fear and antibiotics are generally minimised. All farms have loose housed animals which enables higher milk production and quality from more movement and natural behaviour. Overall these farms enable an acceptable level of welfare so dairy animals have minimal negative experiences and a balance of positive experiences. They have a life worth living in exchange for better milk supply.

---

2000 respondents from 6 cities: Mumbai, Kolkata, Delhi, Chennai, Hyderabad, Bangalore.

Farms and dairy animal welfare was assessed in 2017/2018 by World Animal Protection technical staff using their own farm questionnaire and Assurewel dairy templates and explanatory notes. http://www.assurewel.org/dairy Some farms have been visited more than once, during different seasons [dry and monsoon].
2. Jharanai farm – higher welfare supplies city

With increasing demand for higher quality loose milk, Jharanai farm established a direct distribution network, which now supplies the majority of loose milk customers in the city of Bhubaneswar. Encouraged by the Chairman of Kvality dairy, Mr Ardhendu Sekhar Panda, owner of Jharanai farm in Ganjam, Odisha, believed that the provision of loose milk should involve animals with minimum welfare and so established the farm in 2011. After visiting conventional dairies, Mr Panda recalls;

“I saw the condition of animals and farmers. Animals are neglected and this is not the right thing. Production was around 4-5 litres per animal. That is when I thought of creating a higher welfare farm to set as an example. These animals give us milk; they deserve better treatment.”

He has seen important benefits from higher welfare practices such as:

“increased milk yield, reduced expenditure on cattle feed and medication. There have also been a lot of savings, for example we saved approximately Rs 50,000 per month on medicine. By installing our own feed mixing centre we save around INR 2.5 lakh a month. In addition to this, the quality and quantity of milk has also increased.”

Jharanai herd is predominantly Holstein-Friesian or Jersey crossbreds with a small amount of Haryana and Sahiwal genetics for local adaptability and resistance to tick diseases. Calving occurs year round after artificial insemination and animals are identified by individual ear tags (not branding or tattoos). Basic farm profile:

- 200 cows, 60 replacement heifer calves, 15 bull calves
- A dedicated shelter area (400 x 30 ft)
- Water tanks every 25ft provide tested bore water 24 hours a day to animals
- Cows are fed four times daily and machine milked twice daily
- Average production per cow is 10 litres per day and increasing (October 2017)
- IR12 per litre profit

After various feed sourcing challenges, Mr Panda works with local farmers to ensure a sustainable supply of fodder and stores excess as silage. He uses a low cost formula feed, based on cow needs and seasonal availability of ingredients plus adds a good quality mineral mixture, green and dry fibre to the concentrate feed, all prepared and manually fed out on farm. Cows feed when ready and without competition in the housing barn. Average herd body condition score of adult cows assessed was moderate (2.5-3.5).

"A simple body condition score system can be used regularly to objectively assess cow condition and nutritional status for welfare, production and reproduction based on the international 5 score system. Thin (BCS <2), moderate (2 to 3.5) and fat (>3.5 to 5) as summarised; http://assurewel.org/dairycows"
As common in modern dairies, Mr Panda’s cows are free to move - they are not permanently tethered or housed indoors. He has a simple open pen system, with a central corridor for feeding access, dry areas to rest and natural ventilation assisted by simple fans to reduce heat stress. They have daily outdoor access, but cattle prefer to remain under shelter during the heat of the day and venture out at cooler times. More shade via trees or shelter would be even better to encourage more use of the outdoor area and access more space. Mr Panda’s cows are kept in groups based on age, stage of pregnancy, milking potential and health, as is common practice.

Health and welfare plan: Like most dairy farms the main health concerns are hoof problems and lameness, mastitis, reproductive issues, and digestive issues especially with calves. Mr Panda has reduced rates of mastitis by good prevention management including regular cow washing, general hygiene, daily milking checks and weekly checks of the milking machine. Cow teats are cleaned before and dipped after milking, and the milker keeps a sharp eye out for individual and herd variation via daily milking records.

Cow wash on entry to the parlour yard. Parlour with flexible sprays and post-milking iodine.
After milking cows pass through a medicated foot bath to help prevent lameness. He has also managed to decrease rates of lameness by regular lameness checks, hoof trimming, improving the flooring and not tethering. With reduced disease, increased production and income, he can now afford veterinary visits and advice to further prevent and treat cattle as needed. The animal health and welfare plan for his herd includes regular deworming, vaccination and other good levels of preventative care and hygiene. While clinical cases must be treated promptly, the health plan ensures no chronic disease and has enabled reduced antibiotic use.

Regarding staff training, Mr Panda comments; “It was initially difficult but gradually staff have adapted to the new techniques of handling animals and treating them with care. We took baby steps, showed them the result of the changes to change their mindset. It is also important to help them understand the benefits of these changes by showing them the results to convince them to follow these practices. It is evident that now the cows don’t show signs of stress. Their level of aggression has also reduced.”

Training workers and demonstrating the benefits:

Another challenge conveyed by Mr Panda and others was to find and train people with expertise in cattle management. Constant supervision is important during the initial phases. Staff understanding of dairy cow behaviour can also enhance welfare and milk production. Their attitude around cows is also very important, as calm handling of dairy cattle is well established to significantly increase milk yields. Mr Panda’s cows generally allow him and farm staff to readily approach - an indication of minimal fear and routine good handling. No tail docking is done as cows need their tails for natural behaviour and swatting flies. Tail hair trimming can be done if tails are annoying at milking time. No broken tails were found on this or any of the farms during our assessments.
3. Kisan farm – higher welfare, sustainable breeds

Kisan farm is a family owned farm in Tarawadi, an agricultural hub in Haryana State. Mr Kumar started in 1987 with 20 cows. He now has over 100 dairy animals with 90% of them Sahiwal breed, providing consistent, robust production for sale of loose milk and breeding animals. To enable this expansion, he developed covered loose housing areas with comfortable bedding (sand) and added a large wallowing pool to assist cooling during the hottest months.

Wallowing is also good for social and sexual aspects of a dairy herd, improving fertility (especially of buffalos). Wallows are used (except directly after milking) and cleaned every 10 days. The family grows much of the feed and stores surplus as silage to conserve feed for periods of shortage in the rainy season or other lean periods.

Wallowing cools cattle in the summer heat and helps to maintain fertility and production.

The longevity of Mr Kumar’s dairy animals is a key reward from their good welfare. With local breed animals having on average eight lactations, and some many more, he saves on replacement costs, veterinary bills and guarantees a stable milk supply which increases the sustainability of his business.

“There are many benefits to better dairy cow welfare from better yield, better quality of milk and fewer cases of disease. To be honest it’s just good sense and better business. Personally, there is no greater benefit than the satisfaction associated with treating our animals right and caring for them. Other than that, we are also happy to be employed and we run a very self-sufficient farm.” Mr Kumar reflects.

The farm productivity, even with predominantly local breed animals, is well above the national average, as the Sahiwal breed has good milk yield and is cheaper to maintain and feed. As a rural farm, the majority of milk is sold directly to local consumers for freshness and convenience, and the remaining to a local cooperative or processing company. The demand for their local breed cows is also on the rise and their milk attracts a higher price of IR 50/litre (vs 35 for imported breed milk). Mr Kumar says;

“We decided to invest in running and maintaining a high welfare farm because we have been able to see significant increments in milk production. Animal welfare is also very important for our business because we sell our milk based on quality which means a lot to our clients. The premium placed on our product is also related to people’s belief in the goodness associated with use of indigenous cattle for dairy farming.”

5 For more information on the feeding approach at Kisan farm, see our dedicated 2015 case study: https://www.globalanimalnetwork.org/sites/default/files/International/Documents/A%20case%20study%20of%20high%20welfare%20milk%20production%20India.pdf
It’s important to note that with adequate space and simply designed housing, dairy animals (including horned) establish a social order and can exist calmly in groups. The National Code refers to the Bureau of Indian Standards which recommends minimum floor space for adult cows when housed under loose system of housing as 10.5 m², out of which 3.5 m² will be covered i.e. roofed and the remaining 7 m² will be an adjacent open paddock for roaming and rest enclosed by a boundary wall or fence. Likewise, for adult buffaloes the space requirement for loose housing is 4+8 = 12 m². Trees or shade structures should be planted in the outdoor area for shade and shelter.

The Government of Punjab provides a 50% subsidy to farmers for the construction costs of floor space allocation in the ‘model cattle shed’ design. This model allocates a slightly higher space for loose housed dairy animals.

The cattle on Kisan farm are only tethered for milking. Otherwise they exist in pens or under cover in groups. Mr Kumar reflects on cattle behaviour and housing:

“Our own experience in dairy farming has taught us that animals essentially like to stay clean, their claws need trimming on a regular basis, they like to sit in dry areas- all of these things affect their productivity. It is very important to take care of the animal and be mindful of their behaviour (and changes to it) and feeding. With higher levels of welfare and cleanliness there are fewer cases of diseases i.e. mastitis, lameness etc. Prevention is better than cure!”

Shelter and ventilation is essential to reduce heat stress and preserve milk production. Heat stressed animals have significantly reduced milk production and fertility.

Natural ventilation assisted by low cost fans as on Nannu and Jharanai farms is important for better cooling and prevention of heat stress. Wallows as used on Kisan farm, are ideal, though should not be used within an hour after milking.

Dairy animals naturally spend around 50% of their day lying down. Good deep bedding is associated with longer resting times and up to 15% higher milk yield.

Sand used by Kisan farm provides excellent bedding as it drains well and doesn’t usually clump. The use of recycled dry manure also provides comfortable dry bedding for resting areas. Nannu farm dries and shreds manure before spreading as bedding on top of a concrete base. All bedding needs regular top up and raking to avoid clumping to optimise use.

Twice or thrice daily cleaning of the passage area to remove manure. Nannu dairy has an automated winch system for scraping manure which reduces labour time.

In the monsoon, farms reported that mosquito nets and provision of fans for temperature control made a significant difference in the animals’ welfare levels.
4. Nannu farm – higher welfare modern systems

Leadership runs in the Kumar family. Mr. Ashwani Kumar started Nannu farm five years ago. He admits:

“When I started my farm, I had no knowledge of cattle welfare and behaviour patterns. However, I eventually started studying and observing their behavioural patterns. This helped me determine, with conclusive evidence, that animals with higher welfare are more productive. Stress-free cows produce more milk!”

When visited during the monsoon, 78 Holstein x Friesian dairy cows were milking, producing on average of 15 litres each per day, increasing during the dry months. He had also sold 32 replacement heifers during 2017 and his milk sales have been steadily increasing. Mr. Kumar has recently changed to a direct marketing model, selling Nannu loose milk to customers in a 45km radius at IR 44 per litre, based on the high quality of his milk. If needed he can also boost fat content by adding higher welfare buffalo milk. His farm and marketing model is profitable (profit is 19IR per litre milk) and has been replicated on another nearby farm he manages, plus one farm supplying consumers in Bangalore.

“...people pay a higher price for the high-quality milk they get from me. This is only made possible by taking care of the animals on this dairy farm.”

<table>
<thead>
<tr>
<th>Measures</th>
<th>Nannu Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average milk production (L/cow/day)</td>
<td>15 litres (August 2018)</td>
</tr>
<tr>
<td>Maximum milk production (L/cow/day)</td>
<td>Up to 30 litres</td>
</tr>
<tr>
<td>Culling of herd (%/year)</td>
<td>2-3%</td>
</tr>
<tr>
<td>Annual mastitis herd incidence</td>
<td>6% / year</td>
</tr>
<tr>
<td>Annual herd lameness incidence</td>
<td>Occasional incidence</td>
</tr>
<tr>
<td>Profit with direct sale of loose milk meeting minimum welfare requirements</td>
<td>19IR per litre</td>
</tr>
</tbody>
</table>
In addition to the basics of good loose housing, comfortable bedding, constant access to clean water, shelter and appropriate feeding, Mr Kumar and staff report:

“Some of the initial improvements that made a significant impact were animal grouping according to milk production, feed formulation and overall management practices helped show marked improvement in production and over all functioning.

“A cow with high welfare and low levels of stress will likely not get unwell on a regular basis thereby reducing medical costs. These cows also have a higher pregnancy ratio which, in turn, helps lower semen cost.”

The farm is also more sustainable in terms of reduced culling, lameness and mastitis. Daily checking for lameness as they walk to and from the milking parlour aids identification. Clean bedding has also helped to reduce mastitis levels. With these savings, he invests into operational improvements, health care and veterinary assistance. Regular vaccination for Foot and Mouth Disease and Haemorrhagic Septicaemia prevent illness and related production losses and fatalities. Kisan dairy also vaccinates for Brucellosis for prevention of infection and transfer to humans.

Regular raking of the bedding is recommended to keep the dry manure bedding soft and maximise use of these cubicle areas for resting – no cows should be resting on dirty or wet areas as this predisposes them to feet, claw and skin infections as well as pressure sores and other risks associated with dirty dairy animals. Regular body condition scoring would also enable individual monitoring for nutritional adjustment to avoid excessive weight loss of milking cows which can impede next conception. Mosquito netting is also beneficial during the monsoon.

Importance of good calf care:

Recently, Mr Kumar expanded with a second shed for calving with loose housing pens for calves, room to exercise and mats with sawdust for dry, comfortable resting. All calves (including males) are provided 2.5 Litres colostrum within hours of birth. They are then bottle/bucket and teat fed regularly for the first 4-5 days until weaned to solid food around 30 days. The use of (well cleaned) teats is essential for sucking behaviour, good stomach development and further normal behaviour. Abnormal behaviours such as tail sucking, tongue rolling or sucking other calves, develop when calves are bucket fed without teats and housed in cages or crates.

If any weaned calves are later disbudded, sedation and pain relief is used to minimise pain and enable accurate disbud- ding as the calves remain more still. Good hygiene in calf areas is essential, as diarrhoea can be a significant challenge.

If not kept as replacement heifers, all calves (including males) are responsibly sold at one year to nearby farmers. Unwant- ed calves or culled cows are either kept on farm or passed to other farmers. They should never simply be abandoned – an offence under Prevention of Cruelty to Animals Act 1960 and the National dairy code. Sexed semen is increasing in India and will assist to reduce unwanted males and rapidly build the national herd.

Finally, Mr Kumar advises that while significant capital is required to establish a business like Nannu farm, he has found there is a strong local demand for higher quality welfare milk. He now manages a similar farm near Bangalore, replicating his higher welfare model.

“We also want to initially expand our operations in smaller towns since there is greater knowledge of our brand and the welfare we provide to our animals in these parts.”
5. Dairy buffalo-loose housing systems

India contributes around 60% of the world’s buffalo milk, predominantly via smallholder production. Buffalo milk has a higher level of protein (4.2 to 4.5%) and fat (7 to 8%) than cow milk (protein: 3.5% and fat: 4%). From our recent research, consumers of buffalo milk prefer it because they perceive it as sweeter, thicker and more nutritious.

However, most producers don’t appreciate the importance of the basic needs and welfare of buffaloes. As the Chief Veterinarian of the Central Institute of Research on Buffalos (CIRB) Dr Mehrara states;

‘Animal welfare has substantial effect on the productivity (milk production and reproduction); Animal welfare is providing proper housing, fodder as per the requirement, wallowing pool, loose living conditions that suit the animals’ physical and behavioural needs. Cost savings can also be seen.’

The clear majority of Indian milking buffalo are tethered permanently, including all urban and peri-urban buffalos, restricting basic movement, access to water and a range of natural daily behaviours including idling, comfortable resting, wallowing and a range of other social behaviours. This impacts production and milk let down, often prompting routine use of oxytocin. While Murrah buffalo are predominantly used for dairy in India, at CIRB they have developed the Nili-Ravi breed;

‘Buffaloes are kept in loose housing to keep them happy and with 24/7 water access. There is a huge difference in animal’s productivity when they are allowed to move or graze freely. Our buffalos also have very low levels of mastitis (3-4%) and essentially no lameness. Longevity of animals is up to 12-15 years.’
Production performance of Murrah buffalo in tied housing vs loose housing has also been studied, and the result proved beyond doubt that loose housing is more profitable, with increased yields\(^6\). Murrah buffalo have also been found to be more docile than most cattle in India. This belies their apparent submission to tethering, yet provides a key opportunity for loose housing. Selecting for docile animals and minimising stress has clear advantages in loose housing, handling and milk let down. Some larger commercial farms have loose housed systems, similar to those described above for cattle.

Even with their horns, loose housing of buffalo is certainly possible on a small scale. As mentioned above, a minimum space recommendation is 12 m\(^2\) per adult animal, including 4 m\(^2\) under cover. Loose housing is also crucial for continual access to water, and buffalo will drink at least 4 times daily and this increases with higher producing animals. In areas where loose housing cannot initially be practised, buffalo should be let out into an open paddock or exercise yard overnight to provide opportunity for natural breeding behaviour and ideally wallowing.

Due to their darker, thicker skin and far fewer sweat glands than cattle, buffalo are less heat tolerant. If buffalo are not provided with proper shelters, wallows or cool showers, their feed intake and growth rate declines, and there could even be loss of body weight. Water intake increases and in the case of lactating buffalo there could be a drop in milk production. There is also a marked reduction in fertility. CIRB has a large wallow pool for use in summer;

Wallowing is ideal for cooling and also important for social behaviours and fertility. CIRB also have fans and gunny bags for cooling in the milking parlour plus mosquito netting to improve animal comfort and milk production. These provisions can also be made on a smaller scale for buffalo. While less effective than wallowing, showering (even a few minutes twice daily) can also assist in cooling and improved milk production. A higher conception rate of 80% was obtained in animals given showers in addition to wallowing facilities\(^7\). This may also prevent death of unborn calves. Brushes are also enjoyed by buffalos and assist with cleaning and skin health.

---


Although thicker skinned, buffalo are still very vulnerable to pressure sores and infections on hard flooring. The use of comfortable bedding or rubber mats is a solution and just like cows, this increases the resting period and milk production. Mats currently cost around INR1200 and last around 5 years. They should be regularly cleaned.

All the above is fundamentally part of preventative health care plus CIRB regularly vaccinates and deworms buffalo, as well as daily checking and preventing mastitis. Buffalo are however known for lower rates of mastitis and lameness generally.

The CIRB encourages loose housing and higher welfare;

‘Trainings are provided to local farmers as per their motivation to increase productivity and improve animal welfare. CIRB also want to manage animals in a better way and promote it so that animals are genetically superior in the future.’

Pen housing of buffalo calves is also recommended as part of good care for tomorrows cows. Bedding also assists newborn calves and during the colder seasons.
Poor welfare is a significant risk for farmers, businesses and national production. Yet local solutions often come from farmers themselves, innovating to solve local problems. There are some aspects that can be improved more readily than others, and with little to no cost.

For example, in addition to aspects mentioned above, worker attitude and humane handling of dairy animals is very important, reduces stress and fear and can contribute up to 7% higher production. Similarly, providing colostrum, checking for lameness and body conditions essentially have no cost. While decent shelter and basic vaccinations may be relatively low cost and loose housing very possible once the benefits understood. These aspects then assist farmers to accrue savings for other investments that further improve welfare and production.

These profiled farmers offer the following advice, encouraging others to embrace higher welfare and even visit their farms:

Mr Panda says: “I will ask them to visit my farm, see the benefits and learn these practices and implement them at their farms. We will provide all possible technical support. Once they start implementing these higher welfare practices, they will understand the benefits. If more and more people start adopting these practices, then this will also help improve the economy of the villages.”

Similarly Mr Kumar of Kisan farm: “In our opinion, farmers learn by example and by what they see so we encourage our peers to come to our farm and study our business model, which in turn would help them increase the productivity of their own animals and run their farm efficiently.”

Mr Kumar of Nannu farm: “I would advise all dairy farmers to focus on animal behaviour and welfare and invest time in building their own brand and direct marketing of their own product. High welfare is a one stop solution to all your problems!”

This report also demonstrates existing opportunities for direct marketing of better welfare and quality milk transported from rural farms to the door of urban customers. This means greater health, safety and welfare for consumers. Good animal welfare is good for business, good for animals and good for consumers.

World Animal Protection is asking companies to:

Commit to animal welfare throughout their supply chain:

▸ Committing to not sourcing from urban and peri-urban dairies by end 2020

and

▸ Committing to implement World Animal Protection’s 5 Basic Minimum Requirements within five years and report annually on our website and in Annual Reports on our progress in implementing these requirements. World Animal Protection’s 5 Basic Welfare Minimum Requirements are:

1. Provide 24 hour access for all animals to clean water, and access to good quality feed

2. Provide access to shade, shelter and comfortable bedding for all animals

3. No permanent tethering and access to suitable outdoor area daily

4. Provide adequate colostrum and health care to all dairy animals, including pain relief for painful procedures

5. Provide good handling and develop a plan to manage unwanted animals – no abandonment
Basic Dairy Welfare Practices

Meeting these provisions to the Five Freedoms is good for animals, people and business.

Provisions so freedom from thirst and hunger
For all animals:
24 hour access to clean water
Access to good quality feed

Provisions so freedom from discomfort
For all animals:
Access to suitable shade/shelter
Comfortable resting area

Provisions so freedom to express natural behaviour
For all animals:
No permanent tethering/caging
Suitable outdoor access

Provisions so freedom from pain, injuries and disease
For all farms:
All calves receive adequate colostrum and care
Access to veterinary care
Animal health and welfare plan (including pain relief for procedures)

Provisions so freedom from fear and distress
For all animals:
All of the above plus good handling
A plan to manage unwanted animals
### Key features and benefits of minimum basic dairy welfare in India:

<table>
<thead>
<tr>
<th>Key features</th>
<th>More detail</th>
<th>Animal welfare benefits</th>
<th>Production / Economic benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy animals are housed in groups, with shelter and ventilation.</td>
<td>No permanent tethering, hobbling, caging of any dairy animals (including calves).</td>
<td>Animals have freedom to turn, move and exercise. Social interaction and herd hierarchy.</td>
<td>Reduced mastitis, lameness, infections. Improved health, reduced use of antibiotics - better milk quality.</td>
</tr>
<tr>
<td>Good shelter/shade /space is essential. Wallowing options important for buffalo, ideal for cattle.</td>
<td>Good, dry flooring and comfortable resting reas</td>
<td>A minimum of 10.5m² per animal is recommended for adult cows (this can include 3.5m² under shelter and 7m² outdoor access) and 12m² (4 + 8) for adult buffalo - reducing stress, infections, improved resting.</td>
<td>More resting, better productivity. Marketing options for minimum welfare milk.</td>
</tr>
<tr>
<td>Even smallholder farmers can use natural materials or existing sheds (where tethered) to for a sheltered loose housing. As a minimum 2 hours daily exercise has substantial benefits.</td>
<td>Good flooring and comfortable resting reas</td>
<td>Good lighting and natural ventilation plus fans assists heat reduction and drying surfaces for cleaner animals, less infections and lameness.</td>
<td>Fans low cost. Use of manure for biogas can offset electricity cost.</td>
</tr>
<tr>
<td>Solid, dry, non-slip flooring is essential to avoid injuries and enable cleaning.</td>
<td>Dairy animals have poor sense of depth and flooring consistency and contour is important to encourage smooth movement and avoid slipping and injuries.</td>
<td>Dairy animals prefer to rest on dry, deep, comfortable bedding. This is associated also with increased cleanliness and reduced infections (mastitis, vaginitis, lameness) and pressure wounds.</td>
<td>Improved movement and handling in housing. Clean animals. Less time and water for washing.</td>
</tr>
<tr>
<td>Dry, comfortable resting areas can be provided by river sand, recycled processed manure, sawdust, rice hulls, straw, peanut shells etc. Top up and rake regularly.</td>
<td>Bedding in resting area (if cubicles used must be well-designed allowing easy rising and movement of animals.)</td>
<td>Clean dry resting areas improves milk production, cleanliness.</td>
<td>Clean dry resting areas improves milk production, cleanliness.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Worker satisfaction. Savings from less treatment costs</td>
</tr>
<tr>
<td>Key features</td>
<td>More detail</td>
<td>Animal welfare benefits</td>
<td>Production / Economic benefits</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>-------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Loose feeding and constant clean water access to animals.</td>
<td>Good quality feed - no moulds or aflatoxins. Appropriate feed to maintain moderate body condition. (Silage storage)</td>
<td>Basic requirement to avoid hunger, metabolic disease and toxicity.</td>
<td>Essential for good milk production and quality. Minimise risk of toxins and contaminants in milk.</td>
</tr>
<tr>
<td></td>
<td>Feed usually without tethering on floor is best. Dividers reduce fighting and access for all to eat at once.</td>
<td>Avoids feed competition. Animals can choose when and where to eat.</td>
<td>Reduced feed waste and labour.</td>
</tr>
<tr>
<td></td>
<td>Clean water troughs with 24 hour access for all animals, including calves.</td>
<td>Essential to avoid thirst in dairy animals, and maintain hydration and health.</td>
<td>Essential for good milk production - higher yields with ad lib access.</td>
</tr>
<tr>
<td>Health, welfare and calf management</td>
<td>All farms or villages have a health and welfare plan / calendar. Regular vaccination, deworming is calendarised plus checklists for regular monitoring by farm or extension staff. Eg. basic mobility or lameness checks, check for skin lesions or injuries, check for body condition score.</td>
<td>Minimise or prevent disease, pain, fear and distress. Prevent losses (FMD, HS).</td>
<td>Reduced vet costs and lost production. Improved immunity, reduced disease and use of antibiotics. Reduced zoonoses (Brucellosis, TB).</td>
</tr>
<tr>
<td></td>
<td>All calves (male and female) should receive 2 litres of colostrum within hours of birth. Disbudding should be performed with sedation and pain relief. Tail docking is not legal.</td>
<td>Ensure the welfare issues and benefits are monitored.</td>
<td>Robust replacement heifers, some sale of male calves, cultural acceptance.</td>
</tr>
<tr>
<td></td>
<td>Unwanted animals are responsibly managed. Calves and culled cows should not be abandoned.</td>
<td></td>
<td>Use of sexed semen assists male calf and reputational issue plus helps build national cow herd and achieve 2025 Indian dairy herd target.</td>
</tr>
</tbody>
</table>
201A, D-21, 2nd Floor, Corporate Park, Near Sector-8 Metro Station, Sector-21, Dwarka, New Delhi – 110077 INDIA
91-11-46539341

info@worldanimalprotection.org.in
www.worldanimalprotection.org.in