

Popular Article

Animal Welfare and Welfare Issues in Various Livestock Species

Anmol Pareek

M.V.Sc scholar, Division of Livestock Production Management, F.V.Sc&AH ,SKUAST-Jammu

Introduction

Animals have been contributing in human economy from a long ago. Animals serve humans in form of food (Milk, Meat), Fiber(wool), hides and skins and some animal parts and products have significance in traditional pharmacopoeia. With rising socioeconomic affluence, public perception of animal welfare has improved, veterinarians are being expected to know more about animal welfare than only health and treatment. Human consumption of animal product has increased and majority of these goods come from system of intensive farming, where many animals are kept in condition that is undesirable to many experts from perspective of animal welfare. Animal welfare matters not only because it is corelated with human welfare but animal welfare is itself a subject. Here we discuss about welfare and welfare issues in various animals.

What is animal welfare?

OIE defines Animal welfare as “Physical and mental state of animal in relation to condition in which it lives or dies”. Animal welfare is a multifaceted, complex topic that involves scientific, ethical, economic, cultural, social, religious and political dimensions. Animal welfare includes environmental adaptation, animal sentience, having healthy and natural life, addressing animal needs, and comprehensive frameworks for animal welfare, including five freedoms, five domains, and welfare quality standards and principles.

Welfare issues in animals

Welfare issue in dairy animals	
Disbudding, dehorning and horn tipping	Horns are the defence mechanism provided by nature to protect self and calf from predators. Dehorning and disbudding without anaesthesia is extremely painful to the animal.
Tail docking	Tail is used to keep flies away. Docking of tail cause discomfort to animal and normal behaviour of animals.
Animal identification methods	Ear tagging, Ear notching, Branding, Tattooing and radio frequency identification device are commonly used identification method. OIE recommends replacement of current procedure with less painful procedure to elevate animal welfare.
Lameness	Poor hygiene and rough gravel floor cause severe hoof disease resulting in lameness. The gait of animal is changed due to severe pain.
Mastitis, Infertility and Hormonal injections	Mastitis, Infertility and Lameness are three major causes of culling of dairy animals. Mastitis is a painful condition of dairy animals derived from unhygienic and poor managerial process. The reason for infertility includes poor nutrition, stress and poor body condition. Animals which are not giving milk after death of calves are administered with oxytocin to let down milk.
Welfare issues in urban dairy animals	Urban and Peri urban dairy farms are purely of intensive type. Here animals are confined in overcrowded environment and poor ventilation which hampers animal welfare.
Surplus dairy calves	Female calves are used as a replacement stock but male calves after weaning are abandoned or sold for slaughter.
Welfare issues in small ruminants	
Welfare issues in housing	Overcrowding, Poor light and ventilation, Poor hygiene and sanitation, Poor housing system and less care in winter and rainy season.

Welfare issues in feeding	Delay in colostrum feeding, Grazing management, Unbalanced and nutrient deficient feed and fodder, Poor quality water.
Welfare issues in breeding	Indiscriminate breeding and castration.
Welfare Issues in health care	Poor prophylactic measures include vaccination, deworming, dipping and coccidiostat drenching. High level of neonatal mortality.
Other welfare issues	Shearing, Tail docking and Transportation
Welfare issues in pigs	
Welfare issues in Identification procedure	Tattooing, Microchipping, Ear notching and ear clipping.
Welfare issues in Management procedure	Tail docking, Nose ringing, Teeth trimming, ear flank and snout biting and orphan piglets.
Welfare issues in Reproduction control procedures	Using of farrowing crates in farrowing pen and castration in males.
Welfare issues in commercial broiler	
Lameness and leg health problems	Broilers are reared for table purpose hence broilers gain weight rapidly, fast gain in weight cause leg weakness, joint problems and bone fractures.
Metabolic disorders	Ascites caused by insufficient Heart Lung capacity of a rapidly growing bird, Ascites and sudden death syndrome (SDS) are most commonly known metabolic disorders.
Contact dermatitis	Due to overcrowding, wet litter, poor quality of litter or large amount of faeces in litter cause foot pad dermatitis, hock/breast burn.
Feed restriction and Injury during mating	Feed restriction is adopted by various breeders to regulate body weight of birds but this cause aggression and stress due to hunger. Feed restriction also violate “Five freedoms”.

Transportation	Loading, Unloading, Crating and shackling cause severe stress to birds and here welfare is compromised.
Welfare issues in scavenging chicken.	High disease transmission Non - Availability of proper nutrition Inadequate natural or artificial shelter
Welfare issues in commercial layers	
Welfare issues in chick	<i>Killing of male chicks-</i> Male chicks co-hatched with female chicks are killed by suffocation, maceration and sometimes by cervical dislocation, this creates a welfare issue for chicks. <i>Chick handling-</i> In hatchery male and female both chicks should be handled carefully but only female chicks are gently handled, male chicks are subjected to pain and cruelty. <i>Variation in chick and pullet size-</i> Variation in chick and pullet size can result in later problems like pecking, aggression and poor performance.
Welfare issues in housing	<i>Spacing-</i> Most of commercial poultry houses are of intensive type(cage). Here very little space is available for bird to express normal behaviour. <i>Osteoporosis/bone fracture-</i> Structural strength of bone is compromised due to utilization of calcium in egg production. <i>Cage layer fatigue-</i> High and sustained egg output cause skeletal depletion of layers. In this disease the skeleton become so weak that birds become paralyzed. <i>Behavioural deprivation and stress-</i> Cages are confined and small absence of equipment for nesting and dust bathing cause increase of frustration among birds
Welfare issues in environment	<i>Light-</i> Light is necessary to achieve good production but in some cases intensity of light is decreased to prevent cannibalism. Welfare organization recommend that there should be sufficient amount of light so that each bird can see its surrounding clearly.

	<p><i>Ventilation</i>- Provision of ventilation and insulation should be there to prevent heat and cold stress.</p> <p><i>Air quality</i>- In cage system air quality is maintained but in deep litter system due to high level of ammonia air quality deteriorates. High level of dust also affects air quality. Compromised air quality cause lung disease to birds as well as humans working in poultry house.</p>
<p>Welfare issues in management of adult layers</p>	<p><i>Beak trimming</i>- Beak is the primary means of touching and feeling, picking and manipulating objects for birds. Trimming of beak cause immense pain and bird take time to adapt with new beak, so feed intake is affected following beak trimming.</p> <p><i>Emaciation</i>- Metabolic demands are high for High yielding hens. At completion of laying cycle most hens show poor body condition and emaciation.</p> <p><i>Spent hens</i>- Production of layers decrease to 60-70% after 72 weeks of age, so it is non profitable to rear them. Spent hens are sold to slaughter houses, as they have weak skeleton improper handling and transportation hamper their welfare.</p> <p><i>Moultling</i>- Moulting is complete replacement of old feathers by new one. Forced moulting through feed withdrawal is widely practiced in India. Animal welfare organizations criticize this practice.</p>
<p>Welfare issues related to common vices among layers</p>	<p><i>Injurious pecking</i>- Injurious pecking covers group of behaviour which can occur in laying flocks. It includes feather pecking, vent pecking and cannibalism.</p> <p><i>Feather pecking</i>- Hens peck feather of each other violently, this cause severe pain to bird. It is caused by improper nutrition.</p> <p><i>Cannibalism</i>- Cannibalism indicates consumption of flesh or blood of same species. This vice is seen in layers due to frustration.</p> <p><i>Vent pecking</i>- Feather pecking and vent pecking leads to cannibalism. Vent pecking is directed around tissue of cloaca. Vent pecking leads to death.</p>

Conclusion

Animals are the eternal part of human livelihood since long ago. Humans consume animal products like milk, meat, skin and wool for their sustainable livelihood but welfare of animals was neglected. In recent years due to increasing demand of animal products animals are reared in intensive system where animal welfare is compromised and the various welfare issues are discussed above. Animal welfare laws and several non-governmental organizations stand in favour of animal welfare, their initiative created awareness among people for welfare of animals, but there is a vast scope of improvement in sector of animal welfare.

References

- Langford, M. J. (1989). Animal welfare and human welfare. *Applied Animal Behaviour Science*, **22**(2), 95-103.
- Costa, J. H., Cantor, M. C., Adderley, N. A., & Neave, H. W. (2019). Key animal welfare issues in commercially raised dairy calves: social environment, nutrition, and painful procedures. *Canadian Journal of Animal Science*, **99**(4), 649-660.
- Emily A. Buddle, Heather J. Bray, Rachel A. Ankeny. (2021) "Of course we care!": A qualitative exploration of Australian livestock producers' understandings of farm animal welfare issues, *Journal of Rural Studies*, Volume **83**, Pages 50-59.
- Hernandez, E.; Fawcett, A.; Brouwer, E.; Rau, J.; Turner, P.V. (2018) Speaking Up: Veterinary Ethical Responsibilities and Animal Welfare Issues in Everyday Practice. *Animals*, **8**, 15.
- Krishna Prasad Acharya, Narayan Acharya & R. Trevor Wilson. (2019) Animal Welfare in Nepal, *Journal of Applied Animal Welfare Science*, **22**:4, 342-356.
- Animal welfare issues(MAW-002) study material, PGDAW, IGNOU
- Sinclair M, Phillips CJC. (2019)Asian Livestock Industry Leaders' Perceptions of the Importance of, and Solutions for, Animal Welfare Issues. *Animals*. **9**(6):319.