



Improving Farm Animal Welfare in India: The Way Forward

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Received: December 02, 2019; **Published:** December 02, 2019

Introduction

India has shown robust growth in food animal production in the last three decades thereby increasing the domestic supply and demand of food products such as meat, egg and milk. Poultry production (chicken meat and eggs) has been growing at 8 to 10 percent per annum for a couple of decades. Milk production and red meat production (particularly goat meat) also continues to grow, all of which contribute to high domestic availability of animal protein which in turn have the potential to reduce malnutrition in vulnerable populations. One of the factors which helped India to increase production of animal protein, apart from genetic improvements was intensification of farm management which is largely copied from western countries, particularly in poultry production and in some aspects in dairy production, albeit more recently. Most western countries have realized that intensification without proper checks and balances is not always a good thing because the increase in production comes at the cost of farm animal welfare and other sustainability issues such as antibiotic resistance and environmental degradation. How can India increase animal protein production while safeguarding animal welfare standards, reduce antibiotic use, and ensure environmental protection? These are the million dollar questions farmers, producers, animal scientists and veterinarians should be working on now. Our focus in this editorial will be to highlight some practical ways to move forward for improving farm animal welfare in India.

Preserving diverse models of food production to improve welfare

One of the main strengths in Indian animal protein production industry is the diversity of methods of production. Preserving small farmers who own few animals in their backyard to highly industrialised global producers all contributing equally to the farm

animal sector is important. India still has significant numbers of backyard farming particular in the poultry, dairy and goat sector. Many of the problems plaguing the farming communities in industrialized countries is that they have abolished backyard farming and have thereby completely discontinued diversified models of food production. With the current realization in the west that industrialized methods of food production have several ill effects on the welfare of animals, they are having a hard time turning back the clock. India has the opportunity now to not fall into this trap and to learn from the experiences of western countries. Example of a welfare issue seen in intensified production systems in poultry birds (reared for egg production) is that they do not have the opportunity to do their normal species specific behaviours such as dust bathing and nesting because of the confined small cages. Similarly, meat birds have high prevalence of lameness due to heavy selection for muscle growth, thereby not able to walk properly, and very high prevalence of lameness in dairy cows when kept always in housing with cemented floor. Not being able to perform some of the natural behaviours which are intrinsic in origin by evolutionary basis and clinically morbid conditions such as lameness have been proved to be a significant welfare issue because it causes pain, distress and abnormal behaviours which in turn is very detrimental to the health of the animal (for example, feather pecking in poultry). One of the best ways to support backyard farming is to create support systems such as 1) easy availability of information related to farm animal production for public, 2) vaccine availability for backyard farmers to control disease outbreak, and 3) encouraging the operation of production through cooperative groups that share profit and loss. A healthy backyard farming system with modern amenities such as vaccines for disease prevention, up to date knowledge on animal welfare issues and biosecurity, and innovative housing

designs with enrichments will improve the welfare of farm animals and create a sustainable system of production. Having said that, intensive farming is not always bad and does not have to be penalised. Particularly egg industry in India is highly industrialised and the only way to improve welfare of these birds is to modify their production system similar to the western countries by altering housing designs (example: increasing the size of cages with nest box and dustbathing box provision in the cages).

Introduce community based welfare audits based on democratic principles

Diversified methods of animal protein production will have challenges in terms of assessment of animal welfare standards and maintaining the high health status of people and animals. When farm animals are reared close to human dwellings, preventing *E. coli* and other zoonotic infections becomes paramount. For example, how do we make sure that a family who have some backyard pigs do not pollute the water supply for the whole village? Increasing social pressure to maintain good welfare in farm animals and biosecurity procedures can be done by several ways. One thing to avoid will be to introduce autocratic laws. Awareness on animal welfare issues and biosecurity procedures should start from grass-roots level. Success will happen similar to other successful projects such as “Swachh Bharat Mission” and “Open defecation Free” which are implemented through democratic tools such as several forms of advertisement and positive reinforcement by specific government subsidies. One specific example where severe compromise in animal welfare for backyard-raised animals is, how the animals are slaughtered for food production. Currently several types of religious methods of slaughter is followed in rural areas. How can the community made aware that slaughtering of animals without proper training can lead to suffering in animals? Making them aware will help them seek out information and training on methods of slaughter which are least painful. Similarly information on maintaining biosecurity not to infect the common water sources, and improve housing conditions for the animals (poultry, dairy or goats) are important steps to improve welfare. Do they have enough space allowance, are the animal house cleaned properly regularly and provision of some enrichments such as bedding in the housing are aspects which need to be looked in to in the animal welfare audit by the community themselves.

Animal welfare education and awareness

There has been increasing acceptance among the scientific community around the world and to some extent, the public that

animals are sentient beings. In response to this acceptance, ethics based arguments from various professional communities have highlighted the need to assess animal welfare at critical points, particularly when we use them for our benefit such as food, sports, trading and draught purposes. They argue that reliable monitoring systems for assessing welfare status and evaluating risks are necessary in order to accommodate these growing societal concerns and market demands. Any welfare assessment tool developed should help veterinarians, animal scientists, producers, transporters, auditors, government agencies, quality assurance managers and others to quantify a welfare problem. By doing this, mitigation strategies can be developed for better welfare practices. Welfare assessment tools should be practical and should help evaluate the changes in welfare longitudinally over time. Veterinary colleges and Universities in India should include animal behaviour and welfare subjects in their curriculum. One starting point for the development of a welfare assessment protocol is an analysis of the Farm Animal Welfare Council’s (FAWC) five freedoms and critically examining how it affects animals raised in different housing systems. The five freedoms in focus should be 1. “Freedom from thirst, hunger and malnutrition 2. Freedom from discomfort: thermal and physical. 3. Freedom from pain, injury and disease. 4. Freedom to express normal behaviours: behavioral restriction due to confinement, and social disruption. The extension departments of veterinary universities should take this message regarding animal welfare and biosecurity to the community by awareness programs, which will create a sustainable community based audit system, which can work for all types of production systems.

In Conclusion, India is in a good position to protect its livestock industry from some of the bad effects of industrial system of production. Promoting backyard production systems and introducing animal welfare audits based on democratic principles can safeguard animals from experiencing unnecessary suffering and create a positive image among the public leading to a lively thriving industry. Veterinary institutes and other stakeholders should play a key role in this transformation. This will help India achieve food sustainability; reduce malnutrition, increase welfare of people and animals.

Volume 2 Issue 1 January 2020

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