



Elucidation on a Need to Assess Animal Husbandry Practices adopted by Maldharis of the Gir National Park & Sanctuary, Gujarat

M. B. Rajput¹, S. J. Vekariya² and C. M. Bhadesiya^{3*}

¹Veterinary Officer, Directorate of Extension Education, Kamdhenu University, Gandhinagar

²Assistant Professor, Directorate of Extension Education, Kamdhenu University, Gandhinagar

^{3*}Assistant Professor, Postgraduate Institute of Veterinary Education & Research (PGIVER), Kamdhenu University, Rajpur (Nava), Himmatnagar

*Corresponding author: dr.chirag64164@gmail.com

Abstract

Livestock keeping is practiced in India from ancient times. It is the backbone of rural livestock owners. Commercial livestock keeping has a basic aim of profit by sale of animal products such as milk. The quality of animal products directly depend on the knowledge level of animal owners and basic husbandry practices adopted by them. Maldharis are livestock owners residing in small settlements in and around Gir National Park & Sanctuary, Gujarat. Livestock owners of urban and nearby rural areas are frequently approached by academicians and scientists to conduct survey studies on various aspects of animal husbandry. Practical feasibility, constant access to communication media and regular upgrading of animal husbandry practices in such areas has led to economic benefits. However, there is a lacuna in available published reports on status of animal husbandry practices adopted by Maldharis of the Gir National Park & Sanctuary. Therefore, the present note highlights the need to evaluate knowledge level and adoption of animal husbandry practices by Maldharis.

Keywords: Animal Husbandry Practices, Survey, Maldhari, Gir National Park & Sanctuary

Introduction

India is blessed with rich biodiversity and wide range of climatic zones proven as strong platforms for growth and survival of different species of flora and fauna (Nala and Bhadesiya, 2020). India is home to various types of native species of domestic and wild animals, reptiles, birds and insects. The country holds respectable position with regards to (a) number of different domestic animal species; (b) characteristics of native breeds; (c) milk production; (d) wild/free-living species of animals/reptiles/birds; (e) well-

planned breeding, improvement and conservation strategies; (f) regular organization of training programmes and surveys to reduce the research-farmer knowledge dissemination gaps; (g) systematic cooperative dairy sector for planned procurement, processing, packaging and distribution of animal products; (h) well-established teaching and training institutes for veterinary science & animal husbandry; (i) well-organized government animal husbandry department deploying qualified veterinary and para-

veterinary staff for uninterrupted veterinary healthcare services; (j) remarkable population of farmers and livestock owners; (k) increasing use of advanced communication media for dissemination of scientific information; (l) effective schemes laid down by the government for the benefit of farmers and livestock owners; (m) organized insurance facilities for livestock; (n) frequent organization of exhibitions/fairs to be attended by national and international stakeholders etc.

Breeds, Products and Animal Husbandry Practices

Indian states have different breeds of animals. Out of all states, Gujarat is home to different breeds of milch animals (cattle, buffalo, goat and camel). The Government of India and Government of Gujarat are taking necessary steps for preservation, conservation and improvement of such indigenous or native breeds. At present, well-known breeds of cattle in Gujarat include Gir, Kankrej and Dangi cattle whereas Banni, Mehsani, Surti and Jafrabadi are recognized buffalo breeds.

Milk is considered as a complete food having major components which are important for growth and maintenance. It is a primary animal product being consumed by almost every Indian citizen. Cattle and buffalo are the main source of milk in India. The commercial collection and supply of milk is carried out by cooperative sectors. Moreover, the procurement, processing and marketing/distribution of camel milk and goat milk is also being encouraged. However, the demand for camel or goat milk is less as compared to cattle and buffalo milk. Therefore, it is necessary to supply good quality milk to the consumers. Here, the quality of milk has direct relationship with animal husbandry practices adopted by livestock owners.

Other animal products include manure [waste material naturally voided by animals (*i.e.*, urine and faeces)] which is used as fertilizer in agriculture. The urine is also being studied for various properties *in-vitro* while the cow-urine distillate is consumed by some people even at present. The '*Panchgavya*' (prepared by using products from a cow) is also believed to be useful for maintaining soil health and improving quality of crops. The quality of all types of animal products depend on the knowledge level and perception of animal owner and on the type of animal husbandry practices which have been adopted by them.

The 'Animal Husbandry' or 'Livestock Husbandry' is the term used to describe care and management of productive animals by humans primarily for profit. The livestock rearing practices differ between cattle and buffalo owners and also differ significantly at rural and urban levels (Bharwad *et al.*, 2016). It is the backbone for survival, sustainable development and livelihood in rural areas. The livestock sector is considered as an economic sector allied to the agriculture sector. However, the current trend of economic benefits clearly depicts that this sector will emerge as a separate sector for sustainable development in rural as well as urban areas.

Animal Husbandry Practices by Maldharis

Well-established and scientifically proven reports regarding knowledge level and adoption of animal husbandry practices for different breeds of cattle and buffalo of different areas in Gujarat are available in form of published literature. However, there is a paucity in available reports on animal husbandry practices in areas which are isolated or difficult-to-approach.

One such area is the 'Ness' (*i.e.*, small localities/settlements) which is located mostly in forest areas. The people residing inside such small settlements are often termed as 'Maldharis' who own a remarkable number of milch animals but are difficult to be approached on regular basis because of their nomadic nature and location deep within the forests/protected areas (PAs). Ness people also use livestock as a source of security/liquidity during an emergency (Mukherjee and Borad, 2004).

At present, Gujarat state has different PAs including segregated small forest areas, National Parks and Sanctuaries. Out of all, the Gir National Park & Sanctuary is a world-known protected area of Gujarat which is considered as the last abode of the Asiatic lions. Created in 1965, the entire Gir PA is located in the western part of Gujarat and covers a total forest area of 1882.64 km² (Saberwal *et al.*, 1994). The Gir itself has Gir West, Gir East and Bruhad Gir areas. These areas are comprised of various Ranges and Beats as defined by the State Forest Department. This huge area has plenty of natural resources, various terrains, different species of rare wild animals and it is also considered as home to ancient Maldhari people who have evolved with time but have been found to adopt certain age-old livestock management practices due to various known and unknown reasons.

Living inside nesses, the Maldharis are mostly engaged in the occupation of livestock rearing. Literature suggests that Maldharis were allowed to remain and continue their traditional practices when the Gir was declared as a PA. Moreover, Gir forest is now virtually considered as the only area where the Maldharis still live [Mukherjee and Borad (2004); Torri (2010)].

The Maldhari people dwell in and around the Gir National Park & Sanctuary. They have remarkable population of livestock animals especially buffaloes. Considering the location of their nesses/small settlements inside Gir West and Gir East divisions, it is also difficult to invite all Maldhari people on a common platform for technical assessment of various practices adopted by them for livestock rearing.

Maldharis generally stay inside nesses and are also nomadic in nature. This leads to propinquity of wild animals, livestock and Maldhari people. Undoubtedly, livestock can suffer from different diseases and disorders. Their presence inside PAs can be beneficial (e.g., as a prey-base/food source for carnivorous wild animals) or detrimental (e.g., with a risk of disease transmission to wild animal species belonging to similar class/family or transmission of zoonotic infections).

Therefore, frequent attempts should be made to communicate with Maldharis of the Gir National Park & Sanctuary to assess present status of animal husbandry practices adopted by them. Such an assessment can be achieved by conducting small or large-scale surveys using prescribed proformas.

Veterinary academicians and experts in the field of veterinary and animal husbandry extension education can plan and conduct such survey studies. Surveys should be directed to assess current status of (a) general animal husbandry practices; (b) milking methods and distribution/dairy practices; (c) animal breeding practices; (d) animal health including common diseases of animals; (e) knowledge on zoonotic diseases; (f) response of Maldharis towards training programmes; (g) needs and constraints associated with livestock keeping in the Gir National Park & Sanctuary; (h) access to veterinary healthcare facilities for sick livestock animals etc.

Conclusion

Extensive details pertaining to knowledge level of and animal husbandry practices adopted by the Maldharis of the Gir National Park & Sanctuary of Gujarat state (India) does not exist at length. Efforts should be made to organize training programmes and to conduct surveys at frequent intervals to improve animal husbandry practices, to lift-up economic status of Maldharis and to establish proper healthcare strategies for their livestock animals in Gir National Park & Sanctuary.

Conflict of Interest

Authors declare no conflict of interest with regards to funding.

Acknowledgments

Authors acknowledge DEE Office; staff of PGIVER and staff of Forest Department, Gujarat.

References

- Bharwad, A.M., Bhadesiya, C.M. and Vaidya, A.C. 2016. Ascertainment of constraints faced by dairy farmers for adoption of scientific dairy farming practices in Anand district, Gujarat. *Advances in Life Sciences*, 5(1):299-302.
- Mukherjee, A. and Borad, C.K. 2004. Integrated approach towards conservation of Gir National Park: The last refuge of Asiatic Lions, India. *Biodiversity and Conservation*, 13:2165–2182.
- Nala, R.R. and Bhadesiya, C.M. 2020. Wildlife Law: Basic aspects and role of veterinarians. In: Compendium of Seminar entitled "The Legal System and Veterinarian's Role" organized by College of Veterinary Science & Animal Husbandry, Anand Agricultural University, Anand (February 1, 2020). Pp:11-17.
- Saberwal, V.K., Gibbs, J.P., Chellam, R. and Johnsingh, A.J.T. 1994. Lion-human conflict in the Gir Forest, India. *Conservation Biology*, 8:501-507.

Torri, M.C. 2010. Conservation of the Asiatic lion: Integrating the vision of park authorities with the values of local communities. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 6(3-4):176-183.

Access this Article in Online	
	Website: www.ijarbs.com
	Subject: Veterinary Sciences
Quick Response Code	
DOI: 10.22192/ijarbs.2020.07.06.007	

How to cite this article:

M. B. Rajput, S. J. Vekariya and C. M. Bhadesiya. (2020). Elucidation on a Need to Assess Animal Husbandry Practices adopted by Maldharis of the Gir National Park & Sanctuary, Gujarat. *Int. J. Adv. Res. Biol. Sci.* 7(6): 77-80.

DOI: <http://dx.doi.org/10.22192/ijarbs.2020.07.06.007>