



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.03

TPI 2019; 8(1): 156-158

© 2019 TPI

www.thepharmajournal.com

Received: 25-11-2018

Accepted: 28-12-2018

P Reeja George

Assistant Professor, Department of Veterinary and AH Extension, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, India

Sreelakshmi CM

Former Post Graduate Scholar, Department of Veterinary and AH Extension, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, India

Demian C Johnson

Post Graduate Scholar, Department of Veterinary and AH Extension, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, India

Correspondence

P Reeja George

Assistant Professor, Department of Veterinary and AH Extension, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, India

The Kasargod cattle system: A descriptive analysis of opportunities

P Reeja George, Sreelakshmi CM and Demian C Johnson

Abstract

The Kasargod dwarf cattle are a native breed of cattle found in Kasargod state of Kerala. Manjeswaram block of Kasargod district of Kerala was selected for the study, from which Badiyadka and Enmagaje panchayats were selected by the procedure of simple random sampling. A list of farmers rearing Kasargod cattle in both these panchayats was prepared in consultation with local veterinarians, progressive farmers and panchayat officials. Simple random sampling was then used to select 60 farmers rearing Kasargod cattle. Among the various factor categories of perceived strengths of Kasargod cattle keeping, the production system features were perceived as most important. Animal features which centered on the productive and functional attributes of the Kasargod cattle were the second most important factor category in this regard. Marketing system features were the least important factor category within the strengths of the system.

Keywords: Kasargod cattle, native cattle, opportunities, farming system

Introduction

The Kasargod dwarf cattle are native cattle found in Kasargod, which is the northern most district of Kerala. This animal has gained importance in recent times due to a growing acceptance of the concept of zero-budget farming. However, the species has not entered the endangered list in a strict sense as the nondescript category of dwarf cattle found in the district are generally included under this category. As per the latest cattle census, (Times of India, Jul 4, 2012,) [4] there were 36,717 non-descript category of cattle in Kasargod. Despite the aforesaid facts, the Kasargod cattle have not been included among the 34 recognized native varieties of cattle in India. The only native breed for Kerala that has found entry into this list is the Vechur cow. It is now well recognized that there is an urgent need to understand the state of Kasargod dwarf cattle population in order to develop well oriented policies and strategies for preserving all the values related to the maintenance of this animal.

Though the adoption of sustainable practices plays an important role ensuring the conservation of native breeds, simply increasing the adoption of best management practices is not enough to respond to complex environmental challenges (Reimer *et al.* 2012) [3].

An exploration of the opportunities of this system would provide areas that are to be strengthened thus helping in the conservation of this animal. Hence a study was undertaken to identify the perceived opportunities of the Kasargod cattle keeping system so that this could be used to contribute to the conservation of this animal.

Materials and Methods

Kasargod is the northern most district in Kerala. It is from this district that the Kasargod cattle have been reported. There are four blocks in Kasargod district *viz* Manjeswaram, Kasargod, Kanhangad and Neeleswaram. In the first stage of sampling, Manjeswaram block was selected for the study since it had the highest population of indigenous cattle among the four blocks. Manjeswaram block is composed of twelve panchayats. In the second stage of sampling, panchayats were taken as the sampling units and from the 12 panchayats, two panchayats *viz.*, Badiyadka and Enmagaje were selected by the procedure of simple random sampling. A list of farmers rearing Kasargod cattle in both these panchayats was prepared in consultation with local veterinarians, progressive farmers and panchayat officials. These lists formed the sampling frame. Simple random sampling was then used to select 60 farmers rearing Kasargod cattle. Randomization of responses was hence ensured. In this study, triangulation -a multi method approach in which quantitative and qualitative research methods are combined to provide a more complete set of findings than could be arrived at through the

administration of one of the methods alone - was used. Further, triangulation was used both as a technique for validation as well as a means to enrich the data and to ensure a comprehensive and deeper understanding of the present situation under investigation (Klein and Olbrecht, 2011)^[2]. In the SWOT analysis, factors affecting a particular situation or problem in a situation are delineated into internal and external factors. Internal factors refer to the attributes of the breed or situation that can be exploited (strengths) or should be minimized (weaknesses) to achieve a goal. External factors are features that foster (opportunities) or hamper (threats) the performance of the breed. The two groups of factors also differ by the extent of control we have on them. External factors are not amenable to control or modification whereas internal factors can be managed to alter the existing situation. This paper discusses the strengths of the system which were arrived at by performing a SWOT analysis on the broad guidelines by Hiemstra *et al.* 2010^[1] as described below.

Phases of the SWOT analysis

i. Definition of the Kasaragod cattle production system

In the discussions with experts and farmers, internal and external factors include all factors that can be controlled and modified in the short or medium term by farmers and their associations. External factors were those related to the broader social, political, economic, environmental and technical contexts that farmers cannot control. In consonance with this definition the Kasaragod cattle production system was discussed and defined by experts. The production system was simplified to take into account the most important components and their interactions as per the broad framework suggested by Hiemstra *et al.* (2010)^[1]. Internal factors were classified into the following five categories as per Hiemstra, *et al.* (2010)^[1] with suitable

modifications.

1. **Animal features:** Productive and functional attributes of animals
2. **Breed features:** Aspects related to the population such as size, breed structure, trends etc.,
3. **Product features:** Quality, uniqueness etc of breed products
4. **Production system features:** Technical, cultural and environmental aspects
5. **Marketing system features:** Aspects of the current marketing of products that are under the control of the farmer

ii. Identification of opportunities of the system

Opportunities pertaining to Kasaragod cattle rearing were identified in the light of detailed review if literature and discussions with Kasaragod cattle keepers, experts in the field, Panchayat officials, and scientists of Kerala Veterinary and Animal Sciences University. They were presented as item statements. All the identified statements were pretested by conducting a pilot study in a non- sample area. Considering the pilot study suitable modifications were made and these factors were listed and included in the final interview schedule. A total of 15 strengths were identified. Responses to each statement were scored on a three point continuum namely agree, disagree and undecided. For each factor, the frequencies of various responses on three point continuum were multiplied with the respective weights and added up to get a cumulative value which was divided by the number of statements under each category to obtain a mean score. Based on the mean score the items were ranked in the descending order and the highest value was assigned to the first rank.

Results

Table 1: Perceived opportunities of Kasaragod cattle keeping system

1	Growing interest in native cattle has contributed to increased price of Kasaragod cattle.	3.00	I
2	There is heavy demand for Kasaragod cattle milk and milk products.	2.91	II
3	There are new initiatives from NABARD and other NGOs which are helping to popularize Kasaragod cattle products outside Kasaragod district.	2.80	III
4	Proximity of Mangalore city – a potential market- is an opportunity.	2.66	IV
5	The increasing popularity of ayurvedic products from native cattle conducive to Kasaragod cattle keeping.	2.16	V
6	Government aided meat processing centers could help the farmer get more money for bull calves.	2.0	VI

The opportunities of Kasaragod cattle keeping as perceived by the respondents is illustrated in Table 1. The growing interest in native cattle and consequent escalation of prices of Kasaragod cattle was the perceived opportunity ranked first by the respondents. Respondents also felt the high demand for Kasaragod cattle milk and milk products was the second important opportunity. The new initiatives by various NGOs and NABARD aimed at popularizing Kasaragod cattle products outside the district was perceived to be the third important opportunity and this was followed by the statement

reflecting the potential of Mangalore which was an important market in this regard. The increased public demand and popularity for ayurvedic products prepared out of native cattle products and government initiatives in starting new meat processing centers for beef were also perceived as opportunities to a lesser extent

Table 2. Matrix for the factor categories of the opportunities identified by the stakeholders of Kasaragod cattle

Weaknesses groups

Table 2: Matrix for the factor categories of the opportunities identified by the stakeholders of Kasaragod cattle

Factor Category Stakeholder influences	Item No From Table 2	3		Factor category Mean 2.80	Factor Category Rank I
	Mean Score	2.80			
	Within category rank	I			
Market for current products	Item No From Table 2	2	4	2.79	II
	Mean Score	2.91	2.66		
	Within category rank	I	II		
Market for new product	Item No From Table 1	1	5	2.58	III
	Mean Score	3.00	2.16		

	Within category rank	I	II		
Policies and Legislation	Item No From Table 1	6		2.0	W
	Mean Score	2.0			
	Within category rank	I			

It is evident from the data in Table 2 that stakeholder influences were perceived as the most important factor among the various factor categories of the opportunities in Kasaragod cattle keeping. More specifically, the new initiatives by Nabard and other nongovernmental organizations working to popularize Kasaragod cattle products outside the state were perceived as an important opportunity for Kasaragod cattle keeping. Markets for current products were the second most important factor category among the various opportunity categories and the heavy demand for Kasaragod cattle milk and milk products coupled with proximity of Mangalore city as a possible destination for these products were the opportunities contributing to the markets for current products. Markets for new products were perceived to be an opportunity, thought to a lesser extent. The factor category policies and legislation was the least important factor category.

References

1. Hiemstra SJ, De Haas Y, Ma'ki-Tanila A, Gandini G. Local cattle breeds in Europe. Development of policies and strategies for self-sustaining breeds. Wageningen, Academic Publishers, 2010.
2. Klein T, Olbrecht M. Triangulation of Qualitative and Quantitative Methods in Panel Peer Review Research. Int. J Cross disciplinary subjects in Edn, 2011, 2(4).
3. Reimer AP, Thompson AW, Prokopy LS. The multi-dimensional nature of environmental attitudes among farmers in Indiana: implications for conservation adoption. Agriculture and Human Values. 2012; 29(1):29-40.
4. Times of India, Jul 4, 2012.