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PERCEIVED CONSTRAINTS IN BUFFALO MILK PRODUCTION

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Abstract: The present study was undertaken to get insight into the constraints faced by the buffalo farmers in milk production in Coimbatore District of Tamil Nadu. Purposive sampling technique was used for selecting Karamadi and Anamalai block of Coimbatore District on the basis of considerable number of farmers who are in the banks of these two blocks are having buffalo farming as a livestock along with agriculture. From the selected blocks, Periya Thottipalayam, China Thottipalayam, Therampalayam and Bellathi villages from Karamadai taluk, Somandurai Chitoor, Thensangam palayam, Anamalai and Kottur villages from Anamalai taluk were randomly selected for the study. From each village, twenty five farmers were selected randomly for the study to arrive a total sample size of 200. A semi - structured interview schedule was used to collect the data. The statistical tool like Garrett ranking technique was used to rank the constraints perceived based on its seriousness by buffalo farmers. In this study, the constraints was studied under eight categories namely Socio-economic, Breeding, Feeding, Management, Health care, Technological and Marketing. The findings of the study revealed that the respondents perceived the problems in buffalo breeding as their most important constraint in buffalo farming and assigned an overall Garrett mean score of 69.58 and it was ranked as "1" followed by constraints in feeding (58.20) ranked as "II" and marketing (56.41) ranked as "III". With pertaining to marketing constraints un remunerative price for the milk was the top ranked constraint (57.22) opined by the respondents followed by exploitation by the middle men (55.17), distance to the milk societies (53.50), problems in milk transportation (51.16) and lack of awareness in marketing strategy (49.33).The present study concludes that buffalo farmers must be educated about animal husbandry practices and be made aware about corrective measures for tackling of these problems.

Keywords: Perceived constraint, buffalo farming and animal husbandry practices.

INTRODUCTION

Indian dairy sector is growing very fast and it rely hugely on buffaloes for milk production. Buffalo farming plays an important role in social and economical livelihood of farmers. Improved managemental practices have been prescribed by various research and development organizations to improve the dairy production but the farmers face various

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constraints in adoption of these practices (Prakash Kumar Rathod *et al.,* 2011). Constraints are the problems or difficulties faced by buffalo farmers while adopting day - to - day animal husbandry practices in their enterprise. Keeping this in mind, the present study was undertaken to study the perceived constraints in buffalo milk production.

MATERIALS AND METHODS

Purposive sampling technique was used for selecting Karamadi and Anamalai block of Coimbatore District on the basis of considerable number of farmers who are in the banks of these two blocks are having buffalo farming as a livestock along with agriculture. From the selected blocks, Periya Thottipalayam, China Thottipalayam, Therampalayam and Bellathi villages from Karamadai taluk, Somandurai Chitoor, Thensangam palayam, Anamalai and Kottur villages from Anamalai taluk were randomly selected for the study. From each village, twenty five farmers were selected randomly for the study to arrive a total sample size of 200. A semi - structured interview schedule was used to collect the data. To find out the most significant constraints perceived based on its seriousness by buffalo farmers, Garrett's ranking technique was used. As per this method, respondents have been asked to assign the rank for all constraints and the outcome of such ranking have been converted into score value with the help of the following formula:

$$\text{Percent position} = \frac{100\ (\text{Rij} - 0.5)}{\text{Nj}}$$

Where Rij = Rank given for the ith variable by jth respondents

Nj = Number of variable ranked by jth respondents.

With the help of Garrett's Table, the percent position estimated is converted into scores. Then for each factor, the scores of each individual are added and then total value of scores and mean values of score is calculated. The factors having highest mean value is considered to be the most important factor.

RESULTS AND DISCUSSIONS

CONSTRAINT ANALYSIS:

OVERALL CONSTRAINTS

Table 1. Constraint Analysis – Overall constraints

Sl. No	Constraints	Overall Garret Mean Score	Rank
1	Socio-economic constraints	39.82	VII
2	Constraints pertaining to breeding	69.58	I
3	Feeding constraints	58.20	II

4	Management constraints	48.07	V
5	Constraints in buffalo health care	51.11	IV
6	Technological constraints	42.41	VI
7	Marketing constraints	56.41	III

It could be inferred from the Table 1 that the respondents perceived the problems in buffalo breeding as their most important constraint in buffalo farming and assigned an overall Garrett mean score of 69.58 and it was ranked as "I". They were also expressed that the constraints in feeding (58.20) and marketing (56.41) were the problems next to breeding and accordingly assigned the second and third ranks respectively.

BREEDING CONSTRAINTS

Table 1.1 Constraint Analysis - Constraints pertaining to breeding

Sl. No	Constraints pertaining to breeding	Garret Mean Score	Rank
1	Non availability of AI facilities	73.45	II
2	Infertility problem	76.55	I
3	Poor conception rate of AI	63.22	III
4	Higher cost for natural service	56.67	V
5	Higher charges for AI service	44.92	XII
6	Inadequate knowledge to detect heat signs	50.66	XI
7	Unable to bring the buffalo to the AI centre/Hospital	55.74	VI
8	Problem of abortion	53.48	VII
9	Post parturient complications	52.66	VIII
10	Lack of good breeding bull	60.68	IV
11	Lack of knowledge regarding silent heat	51.54	X
12	Distance to AI centre/Hospital	52.65	IX

Table. 1.1 shows that infertility problem in buffalo (76.55) was the prime problem followed by non availability of AI facilities (73.55), poor conception rate of AI (63.22), lack of good breeding bull (60.68) and higher cost for natural service (6.67) as first five constraints in breeding and ranked respectively. These findings are in agreement with the findings of Dabas *et al.,* (2004) and Balasubramanian (1995) and Prakash Kumar Rathod et al., (2011).

FEEDING CONSTRAINTS

Table 1.2 Constraint Analysis - Constraints pertaining to feeding

Sl. No	Constraints pertaining to feeding	Garret Mean Score	Rank
1	Non availability of green fodder	60.77	I
2	Non availability of dry fodder	58.75	II
3	High cost of dry fodder	54.85	III
4	Non availability of pasture / grazing land	46.98	IV
5	Non availability of fodder seeds of HYF	36.44	X
6	Lack of knowledge of buffalo feeding practices	40.77	VII
7	Non availability of supplement feed / mineral mixture	31.40	XI
8	High cost of supplement feed / mineral mixture	38.77	VIII
9	Non availability of concentrates	37.93	IX
10	Lack of drinking ponds / water sources for buffalos	43.81	V
11	Lack of land and irrigation facilities for fodder production	41.77	VI

A perusal of Table 1.2 reveals that, non availability of green fodder was the top ranked problem in buffalo feeding with a Garrett mean score of 60.77 followed by non availability of dry fodder (58.75) high cost of dry fodder (54.85), non availability of pasture/ grazing land (46.98) and lack of drinking ponds/ water sources for buffalos (43.81) by the respondents with regard to feeding management. Similar finding was reported by Sagari (2001) and Prakash Kumar Rathod *et al.,* (2011). The findings highlight the point that there was a need to guide the buffalo farmers about enrichment and conservation of the fodder for future use by treating it with various additives and nutrients.

MARKETING CONSTRAINTS

Table 1.3 Constraint Analysis - Constraints pertaining to Marketing

Sl. No	Constraints pertaining to Marketing	Garret Mean Score	Rank
1	Un remunerative price for the milk	57.22	I
2	Distance to the milk societies	53.50	III
3	Exploitation by middle man	55.17	II
4	Problems of transportation	51.16	IV
5	Irregular payment for milk by co operative societies	46.33	VII
6	Incorrect estimation of fat and SNF and procurement of milk	48.40	VI
7	Lack of awareness in marketing strategy	49.33	V

It could be inferred from the Table 1.3 that un remunerative price for the milk was the top ranked constraint (57.22) in marketing of milk as opined by the respondents. They were also expressed that the exploitation by the middle men (55.17), distance to the milk societies

(53.50), problems in milk transportation (51.16) and lack of awareness in marketing strategy (49.33) were the other constraints in marketing of milk in buffalo farming. The findings are in line with Jayalaxmi *et al*. (1997) and Prakash Kumar Rathod *et al.,* (2011). Payments made in fractions were for the major factors which led the imperfect market situations and lower income to the producers in the region. The marketing constraints affect the profits to entrepreneurs adversely. Removal of marketing bottlenecks would go a long way in improving the cost of dairy entrepreneurs (A.R. Verma, 2007).

CONCLUSION

The present study concludes that buffalo farmers must be educated about animal husbandry practices and be made aware about corrective measures for tackling of these problems. The animal husbandry department should enhance their extension activities by acquainting the farmers with improved management and feeding practices of milch animals. Thus dairy farming is considered as an instrument of socio-economic change in the rural areas.

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