



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2022; SP-11(4): 1584-1586  
© 2022 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 16-02-2022  
Accepted: 18-03-2022

**Awate S**  
M.V.Sc Thesis Work,  
Department of Livestock  
Production Management,  
Veterinary College, Bidar,  
Karnataka, India

**Biradar SC**  
Associate Professor and Head  
Department of Livestock  
Production Management,  
Veterinary College, Bidar,  
Karnataka, India

**Waghmare P**  
Associate Professor Department  
of Livestock Farm Complex,  
Veterinary College, Bidar,  
Karnataka, India

**Vivek MP**  
Associate Professor and Head  
Department of Livestock  
Production Management,  
Veterinary College, Bangalore,  
Karnataka, India

**Prakash KR**  
Farm Superintendent, Livestock  
Research and Information  
Centre Deoni, Bidar Karnataka,  
India

**Ananth RD**  
Assistant Professor and  
Department of Veterinary  
Animal Husbandry Extension  
Education, Veterinary College,  
Bidar, Karnataka, India

**Shrikanth D**  
Assistant Professor Department  
of Animal Genetics and  
Breeding, Veterinary College,  
Bidar, Karnataka, India

**Ashwini K**  
M.V.Sc Research Scholar,  
Department of Livestock  
Production Management,  
Veterinary College, Bidar  
Karnataka, India

**Corresponding Author**  
**Awate S**  
M.V.Sc Thesis Work,  
Department of Livestock  
Production Management,  
Veterinary College, Bidar  
Karnataka, India

## Constraints of buffalo owners in adoption of good management practices in North Karnataka region of India

**Awate S, Biradar SC, Waghmare P, Vivek MP, Prakash KR, Ananth RD, Shrikanth D and Ashwini K**

### Abstract

The present study was conducted to document the existing constraints of buffalo owners in adoption of good management practices in north Karnataka region of India. A total of 90 buffalo farmers were asked for the top constraints faced by them to enhance their production potential of buffaloes. Repeat breeding in buffaloes (61), poor conception rate in buffaloes through A.I (54), high cost of concentrate/mineral mixture (63), scarcity of fodder and water during summer (61), insufficient information about deworming importance (22), high cost of treatment (19), unavailability of skilled labour (18), dearth in knowledge about recommended management practices (13) lack of credit facility (87), higher rate of interest on loans (85), lack of insurance facility (83), high cost of construction (79), high cost of concentrate mixture (71), lack of own capital (67), seasonality in consumer demand for milk (83), non-remunerative price for milk (67) were some of the concerns expressed by the farmers.

**Keywords:** Constraints, Indian buffalo farmers, adoption of improved practices

### Introduction

Buffalo are the main stay of dairy industry, especially in Asia and form the frail rural economy in developing country like India. They are thrifty, versatile, adaptable and productive domestic animal. India is world leader in buffalo population comprising, 57 per cent of the world's buffalo population contributing more than 49 per cent to the total milk production (DAHDF, 2018) [2]. Water buffalo (*Bubalus bubalis*) has made a major contribution to agrarian economy of India. Total Buffalo Population in India is 109.85 Million during 2019. The annual milk production is 186 million tons as of 2018. Indigenous/non-descript buffaloes had the highest share of milk production in India with 49 per cent in the year 2020. In tropical climates like India, buffaloes are preferred over cattle because they are able to utilize nutrients from poor quality fibrous tropical feeds efficiently and also possess better disease resistance and adaptability to hot climates (Paul *et al.*, 2003) [4]. Animal husbandry practices play a vital role in the improvement of animal productivity and livestock production. Scientific management will help in reducing mortality and morbidity of livestock which indirectly results in their health improvement. Presently large numbers of nondescript animals are kept and shortage in feed and fodder resources coupled with illiteracy of farmers are some of the reasons causing hindrance to the development of livestock sector. Therefore, it is imperative to assess the reasons for low performance and productivity in buffaloes. Hence, an investigation was undertaken to study the constraints of buffalo owners in adoption of good management practices in north Karnataka region of India.

### Materials and Methods

The present study was conducted for a period of three months, in Kalaburagi district of Karnataka. Personal interview technique using standard questionnaire was used as a tool through which first-hand information was collected. This district was selected due to familiarity of researcher with the area and local language. Random sample size of 90 buffalo owners (45 from each Taluqa) were selected for the study. The variables under study were selected on the basis of extensive review of literature related to the topic of research and in consultation with experts. The semi-structured interview schedule was prepared keeping in view the objectives of the study and was common for all buffaloes owners. Before collection of data, interview schedule was pre-tested.

Apart from interview schedule, observation technique was also used for data collection. Wherever required, data from secondary source was also collected. The Survey was conducted at their home with the help of local people from villages. Objectives of the study were explained with a view to facilitate giving correct responses. Assurance was given that the data collected were utilized for the purpose of research only.

### Results and Discussion

The highest numbers of respondents were given first rank, followed by second; third rank etc. to the 90 buffalo owners while deciding the rank status. Table 1 indicates that major

constraints related to adoption of breeding practices in buffalo were, repeat breeding in buffaloes (61), poor conception rate in buffaloes through AI (54), lack of Pedigree bulls for natural services (21), inability to detect heat symptoms in buffaloes due to silent heat (19), long inter calving period (17), lack of trained person for Artificial Insemination (15), while unavailability of timely artificial insemination facility in villages (7), lack of knowledge of breeding management (5) and lack of faith in artificial insemination (3) were the constraints faced concerned in study area. So the major constraint expressed was repeat breeding in buffaloes and poor conception rate in buffaloes through A.I.

**Table 1:** Problems in breeding practices

Sl. No.	Problems in breeding practices	Frequency	Rank
1	Repeat breeding in buffaloes	61	I
2	Poor conception rate in buffaloes through AI	54	II
3	Lack of Pedigree bulls for natural services	21	III
4	Inability to detect heat symptoms in buffaloes due to silent heat	19	IV
5	Long inter calving period	17	V
6	Lack of trained person for Artificial Insemination	15	VI
7	Unavailability of timely Artificial Insemination facility at village level	7	VII
8	Lack of knowledge of breeding management of buffalo	5	VIII
9	Lack of faith in Artificial Insemination	3	IX

Table 2, indicates the constraints related to adoption of feeding practices in buffalo were high cost of concentrate/mineral mixture (63), scarcity of fodder and water during summer (61), lack of proper improvement of pasture land and development of fodder grasses (41), insufficient information about balanced feeding (25), non-availability of

improved fodder crops (19), while unavailability of buffalo feed at subsidized rate (13) and poor irrigation facilities for growing fodder crops (9) were the constraints in the study area. So, the biggest concern was high cost of concentrate/mineral mixture, scarcity of fodder and water during summer.

**Table 2:** Problems in feeding practices

Sl. No.	Problems in feeding practices	Frequency	Rank
1	High cost of concentrate/mineral mixture	63	I
2	Scarcity of fodder and water during summer	61	II
3	Lack of proper improvement of pasture land and development of fodder grasses	41	III
4	Insufficient information about balanced feeding.	25	IV
5	Non-availability of improved fodder seeds	19	V
6	Unavailability of buffalo feed at subsidized rate	13	VI
7	Poor irrigation facilities for growing fodder crops	09	VII

**Table 3:** Problems in health / disease control practices

Sl. No.	Problems in health / disease control practices	Frequency	Rank
1	In sufficient information about deworming importance	22	I
2	High cost of treatment	19	II
3	Unavailability of on time veterinary services for treatment of buffalo	13	III
4	Lack of knowledge about vaccination against contagious disease	18	IV
5	Lack of knowledge about isolation of sick animals	7	V
6	High rate of calf mortality	11	VII

Table 3 indicated the constraints related to health problems faced by buffalo owners in study area. Major constraints related to problems in health practices were in sufficient information about deworming importance (22), high cost of treatment (19) unavailability of on time veterinary services for treatment of buffalo (13), lack of knowledge about

vaccination against contagious disease (18), while lack of knowledge about isolation of sick animals (7) and high rate of calf mortality (11) were the constraints faced in the study area. So, insufficient information about deworming (22) and high cost of treatment (19) were big concerns.

**Table 4:** Problems in managerial practices

Sl. No.	Problem in managerial practice	Frequency	Rank
1	Unavailability of skilled labour	18	I
2	Lack of skilled knowledge to manage the dairy enterprise	13	II
3	Unavailability of buffalo shed with good ventilation facilities	11	III
4	Lack of sufficient space to keep animal in a healthy situation	5	IV

Table 4 indicated major constraints related to adoption of managerial practice, which were unavailability of skilled labor (18), dearth in knowledge about recommended management practices (13), lack of technical knowledge to manage the dairy farm business (11), while unavailability of buffalo shed with proper ventilation facilities (5) and lack of sufficient space to keep animal in a healthy situation (3) least faced concerned in study area. Unavailability of skilled labour (18), dearth in knowledge about recommended management practices (13) were the top concerns among managerial practices.

**Table 5:** Economic problems

Sl. no.	Economic problems	Frequency	Rank
1	Lack of credit facility	87	I
2	Higher rate of interest on loans	85	II
3	Lack of insurance facility	83	III
4	High construction cost	79	IV
5	High cost of concentrate mixture	71	V
6	Lack of own capital	67	VI

Table 5 suggests the constraints related to economic problems faced by buffalo owners in study area which were lack of credit facility (87), higher rate of interest on loans (85), lack of insurance facility (83), high construction cost (79), high cost of concentrate mixture (71), lack of own capital (67). All the concerns enumerated above were more or less of equal magnitude in economic constraints.

**Table 6:** Problems based on marketing

Sl. no.	Problems based on marketing	Frequency	Rank
1	Seasonality in consumer demand for milk	83	I
2	Non-remunerative price for milk	67	II
3	Distantly located milk collection center	7	III
4	Lack of transport facilities	5	IV

The highest numbers of respondents were given first rank, followed by second; third rank etc. to the 90 buffalo owners while deciding the rank status.

Table 6 suggests the constraints related to marketing faced by buffalo owners were seasonality in consumer demand for milk (83), non-remunerative price for milk (67), while distantly located milk collection (7), lack of transport facilities (5) were least faced concerned in study area. Major constraints related to marketing problems were seasonality in consumer demand for milk and non-remunerative price for milk. These findings are in partial agreement with findings of G. Chandra Sekhar Reddy (2016)<sup>[3]</sup> study who discovered that High cost of pure bred buffaloes, high cost of feed ingredients, non-remunerative price for milk, inadequate supply of concentrate mixture on subsidized cost, feed and fodder shortage, lack of sufficient land for fodder production, low conception rate with A.I in buffaloes, and high incidence of repeat breeding in buffaloes were found to be some of the major constraints perceived by buffalo milk producers.

#### Acknowledgement

Researchers are indebted to the Government of Karnataka and Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar, India staff and farmers of Kalburgi for enabling the researcher to take up the experiment and for the

financial assistance rendered.

#### References

1. Basic Animal Husbandry Statistics. Department of animal Husbandry, dairying and fishery, Ministry of Agriculture. Government of India, 2020.
2. DAHDF. National action plan for dairy development, Vision 2022. Department of animal husbandry dairying and fisheries. Ministries of agriculture and Farmers's welfare, Government of India, 2018.
3. Chandra Sekhar Reddy G. A Study on Buffalo Production System in Guntur district of Andhra Pradesh. M.V.Sc. thesis, Sri Venkateswara Veterinary University Tirupati, India, 2016.
4. Paul SS, Mandal AB, Kannan A, Mandal GP, Pathak NN. Comparative dry matter intake and nutrient utilization efficiency in lactating cattle and buffaloes. J of Sci. of food and Agri. 2003;83(4):258-267.
5. Statista Research Department, 2021.