



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2023; 12(5): 2637-2639  
© 2023 TPI

[www.thepharmajournal.com](http://www.thepharmajournal.com)

Received: 20-02-2023

Accepted: 28-03-2023

## Nagaraj

M.V.Sc Scholar, Karnataka  
Veterinary Animal and Fisheries  
Sciences University, Bidar,  
Karnataka, India

## Prakashkumar Rathod

Associate Professor and Head  
(I/C), Livestock Research and  
Information Centre (Deoni),  
Bidar, Karnataka, India

## Channappagouda Biradar

Associate Professor and Head  
(I/C), Dept of VAHEE,  
Veterinary College, Bidar,  
Karnataka, India

## Ananth Rao Desai

Assistant Professor, Department  
of VAHEE, Veterinary College,  
Bidar, Karnataka, India

## Satish Chandra Biradar

Associate Professor and Head  
(I/C), Department of LPM,  
Veterinary College, Bidar,  
Karnataka, India

## Constraints in green fodder production as perceived by farmers of Karnataka State

Nagaraj, Prakashkumar Rathod, Channappagouda Biradar, Ananth Rao Desai and Satish Chandra Biradar

### Abstract

An ex-post-facto study was conducted to know the constraints faced by the livestock farmers in green fodder production by using a pretested interview schedule through personal interview method. The study involved 90 respondents of Bidar, Kalaburagi and Yadgir Districts of Karnataka. The ranking of constraints was given based on the percentage of severity. The results revealed that scarcity of water/lack of irrigation facilities, preference for cultivation of agriculture/cash crops, low or non-availability of cultivable land, lack of labour or manpower, erratic rainfall were the major constraints followed by lack of fencing or protection for the fodder crops from grazing and wild animals, non-availability of high yielding improved variety of fodder seeds, lack of awareness or knowledge about green fodder, high cost of inputs and topography and soil type are the constraints faced by farmers in the study area. The public and private agencies should make necessary efforts to ensure proper training and on field demonstrations about scientific fodder production to farmers through extension activities. These attempts would address the constraints in study area.

**Keywords:** Constraints, green fodder production, livestock farmers, North Karnataka

### Introduction

The livelihood of more than two-thirds of the rural people in India is supported by animal husbandry, on just 2.3 percent of the world's land area. According to the 20th Livestock Census report, India's total livestock population is 535.82 million, consists of 57.3% of the world's buffalo population, 14.7% of the world's cattle population, around 74.26 million sheep and 148.8 million goats (GoI, 2019) [3]. Fodder production depends on various factors like cropping pattern followed, climatic condition of the area as well as the socio-economic conditions of the household and type of livestock reared (Pawar *et al.*, 2019) [7]. Due to lesser size of land holdings, the farmers are unable to get enough land for other crops and devote more attention towards food grain crops. As food grains and pulses are directly related to livelihood of farmers and they find that livestock can survive on leftover crop residues, giving less priority to fodder crops. Land availability is one of the major factors determining fodder cultivation (Kumar *et al.*, 2018) [5]. There is tremendous pressure on available total feed and fodder, because of increasing livestock population and decreasing land available for fodder production. At present, there is huge gap between demand and supply of animal feed and fodder. Hence, the efforts should be directed to intensify fodder production through various approaches (Ahmed *et al.*, 2017) [1]. As the farmers face several constraints in cultivation of forage crops, these constraints should be identified and addressed to increase production and availability of fodder for sustainable livestock production.

### Material and Methods

The present study was conducted in three districts of north eastern transition zone of Karnataka viz. Bidar, Kalaburagi and Yadgir. Thirty respondents from each identified district were selected. Thus, 90 livestock farmers constituted the sample size for this study. In this study constraints refer to the problems which are affecting negatively to the farmers in intensive fodder production. Ten constraints were identified through review of literature, expert suggestions and personal observation. The structured schedule was administered in two-point continuum viz., Yes or No. Further, based on their responses, frequency and percentage were calculated to infer the results. The constraints faced by the farmers was ranked from I to X in the study.

### Corresponding Author:

#### Prakashkumar Rathod

Associate Professor and Head  
(I/C), Livestock Research and  
Information Centre (Deoni),  
Bidar, Karnataka, India

## Result and Discussion

The livestock feed and fodder can be divided into two broad categories- roughages and concentrates. Feeding of forage to dairy animals is essential for economic and sustainable milk production. The findings of table 1 revealed that the constraints perceived by respondents were scarcity of water/lack of irrigation facilities (100%) and preference for cultivation of agriculture/cash crops (100%) as both of them ranked first. Further, it was followed by low or non-availability of cultivable land (98.89%), lack of labour or manpower (82.22%), erratic rainfall (53.33%), lack of fencing or protection for the fodder crops from grazing and wild animals (4.44%), non-availability of high yielding improved variety of fodder seeds (3.33%), lack of awareness or knowledge about green fodder (2.22%) and high cost of inputs (2.22%) as the constraints in the study area.

Further, the district-wise analysis revealed that scarcity of water/lack of irrigation facilities, preference for cultivation of agriculture/cash crops were the major constraints perceived by respondents of Bidar district, while in Kalaburagi district low or non-availability of cultivable land is also one of major constraints with above constraints as perceived by the

farmers. Similarly, in Yadgir district, along with scarcity of water/lack of irrigation facilities, low or non-availability of cultivable land, preference for cultivation of agriculture/cash crops and lack of labour or manpower is also major constraints in the green fodder production.

Similar results were reported by Tailor *et al.* (2012) [10], Rathod (2017) [8] and Javeed (2020) [4] for scarcity of water / irrigation facilities, lack of cultivable land and non-availability of seeds and lack of quality inputs are the major issues in green fodder cultivation. In agreement with the present findings, Meena *et al.* (2017) [6] found that, lack of demonstration and training was ranked third constraint with severity of 75.69%. Moreover, Suman *et al.* (2017) [9] reported less knowledge among the farmers about fodder production technologies as the major constraints. The reason for lack of knowledge among the farmers can be explained by lack of adequate attention of the farmers in the dairying and unconventional fodder sources. Though government has implemented some of fodder conservation and management schemes, yet fodder scarcity is the major concern of the hour (Earagariyanna *et al.*, 2017) [2].

**Table 1:** Constraints in green fodder production

Sl. No	Statements	Bidar			Kalaburagi			Yadgir			Overall		
		Yes	No	Rank	Yes	No	Rank	Yes	No	Rank	Yes	No	Rank
		f (%)	f (%)		f (%)	f (%)		f (%)	f (%)		f (%)	f (%)	
1	Lack of awareness or knowledge about green fodder.	2 (6.67)	28 (93.33)	VI	0 (00)	30 (100.0)	VIII	0 (00)	30 (100.0)	VIII	2 (2.22)	88 (97.78)	VIII
2	Scarcity of water/lack of irrigation facilities	30 (100.0)	0 (00)	I	30 (100.0)	0 (00)	I	30 (100.0)	0 (00)	I	90 (100.0)	0 (00)	I
3	Low/non availability of cultivable land	29 (96.67)	1 (3.33)	III	30 (100.0)	0 (00)	I	30 (100.0)	0 (00)	I	89 (98.89)	1 (1.11)	III
4	Lack of labour/manpower	15 (50.00)	15 (50.00)	IV	29 (96.67)	1 (3.33)	IV	30 (100.0)	0 (00)	I	74 (82.22)	16 (17.78)	IV
5	Non-availability of high yielding improved variety of fodder seeds	2 (6.67)	28 (93.33)	VI	1 (3.33)	29 (96.67)	VII	0 (00)	30 (100.0)	VIII	3 (3.33)	87 (96.67)	VII
6	Preference for cultivation of agriculture/cash crops	30 (100.0)	0 (00)	I	30 (100.0)	0 (00)	I	30 (100.0)	0 (00)	I	90 (100.0)	0 (00)	I
7	Lack of fencing or protection for the fodder crops	0 (00)	30 (100.0)	IX	2 (6.67)	28 (93.33)	VI	2 (6.67)	28 (93.33)	VI	4 (4.44)	86 (95.56)	VI
8	Topography and soil type	0 (00)	30 (100.0)	IX	0 (00)	30 (100.0)	VIII	0 (00.0)	30 (100.0)	VIII	0 (00)	90 (100.0)	X
9	Erratic rainfall	10 (33.33)	20 (66.67)	V	17 (56.67)	13 (43.33)	V	21 (70.00)	9 (30.00)	V	48 (53.33)	42 (46.67)	V
10	High cost of inputs (seeds)	1 (3.33)	29 (96.67)	VIII	0 (00)	30 (100.0)	VIII	1 (3.33)	29 (96.67)	VII	2 (2.22)	88 (97.78)	VIII

## Conclusion and policy implications

The study revealed that scarcity of water/lack of irrigation facilities, low or non-availability of cultivable land and preference for cultivation of agriculture/cash crops were the major constraints perceived by the farmers. In this context, the government may encourage the farmers through awareness campaign, demonstrations, literature distribution etc. for taking-up scientific fodder production practices along with cultivation of cash crops. Also, government should provide credit facilities and subsidy for purchasing necessary inputs, also make the efforts to provide proper training and on field demonstrations about scientific fodder production to farmers through extension activities.

## References

- Ahmed S, Sahay G, Sridhar K, Singh S, Saxena P, Roy AK. Improved Forage Crop Varieties of IGFRI. Technical Bulletin. Indian Grassland and Fodder

Research Institute, Jhansi, Uttar Pradesh, India; c2017.

- Earagariyanna M, Venkayala J, Kamardi S, Sriramaiah M, Kiran M. Fodder resource management in India- A critical analysis. International Journal of Livestock Research. 2017;7:14-22.
- GoI. Livestock census report of 2019, Department of Animal Husbandry Dairying, New Delhi; c2019.
- Javeed MA, Veeranna KC, Thirumalesh T, Rathod P, Gopala GT, Biradar C. Adoption of Green Fodder Production Practices in Watersheds of Bidar District, Karnataka. Indian. J Vet. Sci. Biotechnol. 2020;15(4):38-42.
- Kumar S, Kalamkar SS, Parihar TB. Constraints facing livestock feed and fodder traders: Evidence from Gujarat in India. International Journal of Pure and Applied Bioscience. 2018;6:208-213.
- Meena DK, Sankhala G, Chauhan PS, Meena M. Knowledge of Farmers about Improved Fodder

- Production Practices in Rajasthan State of India. *Int. J Curr. Microbiol. Appl. Sci.* 2017;6:2013-2025.
7. Pawar, Mahesh, Ashwar, Bharatkumar, Joshi PC, Patil SS. Constraints perceived about fodder production by the dairy farmers of north Gujarat. *Indian Journal of Dairy Science.* 2019;72:565-568.
  8. Rathod P. Attitude of dairy farmers towards cultivation of green fodder crops in Bidar district of Karnataka. *Indian Journal of Veterinary Science Biotechnology.* 2017;12(03):152-156.
  9. Suman M, Kumar V, Kumar A. Study of farmers perception constraints for lesser adoption of fodder production technologies and ways to improve the adoption in Bundelkhand region. *Agricultural Science Digest.* 2017;37:166-167.
  10. Tailor R, Meena GL, Sharma L, Sharma FL. Constraints faced by the tribal farmers in dairy Farming in Udaipur district. *Raj. J Extn. Edu.* 2012;20:187-189.