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Farmers' Perception of Constraints in Adoption of Fodder Production Technologies in Bundelkhand Region of India

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ABSTRACT

The constraints regarding adoption of fodder production technology were studied in Bundelkhand region. Total of 180 respondents were sampled from four districts of regions representing both Uttar Pradesh (UP) and Madhya Pradesh (MP) Bundelkhand in the study. It was found that 84.1% of respondents expressed that small landholding among them was the primary constraint for lesser adoption of fodder production technology in area. About 79 per cent of farmers identified lack of irrigation as the second most important reason for less adoption of fodder technology. The main reason for less Knowledge of fodder production technologies were lack of awareness about improved technologies followed by lack of on-farm guidance/training, lack of lesser resources and lesser literacy among them. The correlation between knowledge gap and adoption gap was highly significant and positive.

Key words: Farmers perception, adoption gap, knowledge gap, bundelkhand, fodder production technology.

INTRODUCTION

Dairy farming has significant share in the income derived from agriculture. Planted grasses, forage legumes and improved fodder trees and shrubs can enhance forage availability and subsequently milk production. In spite of these attributes, use of improved forage in India livestock systems is limited, and animal feed supplies remain largely dependent on natural existing stands, which limit livestock productivity. Provision of forage of adequate nutritional quality is fundamental in ensuring increased livestock production in the developing countries particularly India. The need for cultivating fodder for cattle requirements in India is day to day need in rural sector in general and Bundelkhand in particular (Suman et al., 2006; Suman, 2008). Seasonal shortage of such feeds, especially during dry spells, further impedes growth of the dairy sector and understanding farmers' knowledge on forage production and utilization is key to their promotion for enhanced smallholder dairy development. A study was therefore planned to delineate the cattle owners' perception about the constraints experienced by them in fodder cultivation and also to suggest the potential ways out to improve the situation.

METHODOLOGY

The research study was conducted purposively in Bundelkhand region representing two states namely UP and MP to get the true representation of all the regions of Bundelkhand on the basis of different land use, agro-climatic condition as well as soil and livestock density. Accordingly, four districts were selected which were Lalitpur, Datia, Jhansi and Tikamgrah. From these districts, 9 villages were selected purposively which were having high cattle population. Twenty fodder growing farmers were sampled randomly from each village. Thus, a total of 180 respondents were selected for the study. Data were collected through personal interview method with help of structured interview schedule. The data were collected during the period of 2012-14. The variable constraint was measured in terms of the problems coming in the way of adoption of fodder production technologies as perceived by the sampled respondents and it was measured by asking open-ended questions to them.

RESULTS AND DISCUSSION

The farmers' perceptions were studied in relation to constraints in fodder production and reasons for lesser

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awareness about fodder production technologies. Then, the ranks were given to different responses.

Constraints suggested by farmers in less-adoption of fodder production technologies

Data are presented in Table1 regarding the constraints faced by the farmers. It was found that 84.1 per cent of respondents expressed that small landholding among them is the primary constraint for lesser adoption of fodder technology in area. Thus, the constraint of small land holding was given first rank. About 79 per cent of farmers perceived lack of irrigation as the second most important reason for less adoption of fodder technology. Third constraint as identified by the farmers (77.15%) was lesser priority given to fodder crops. Fourth reason for less adoption was felt as the Anna pratha (62.15 %). Anna Pratha has been a serious problem mentioned by farmers for lesser adoption of fodder and other crops in Bundelkhand region.

Table 1: Constraints suggested by farmers regarding Less adoption of fodder production technologies in Bundelkhand region.

Items	Percent	Rank
Non availability of good quality of seed	54.90	V
Lack of Irrigation	78.87	II
Anna Pratha	62.15	IV
Small size of land holding s	84.11	I
High cost of seed	35.15	VIII
Lack of Guidance/Knowledge	44.21	VI
Shortage of Inputs	38.21	VII
Less priority to fodder crops	77.15	III

Reasons for lesser Knowledge in fodder production technologies

It could be observed from the Table 2 that the main reasons for less Knowledge of fodder production technologies were lack of awareness about improved technologies (76.8%, I rank), followed by lack of on-farm guidance/training (69.8%, II rank) to the people, lack of lesser resources (62.0%,III rank) and lesser literacy (56.3%, IV rank) respectively.

Table 2: Opinion of farmers regarding less knowledge of fodder production technologies

Items	%	Rank
Lack of awareness about improved technologies	76.8	I
Lack of on-farm guidance/training from organized bodies	69.8	II
Lesser resources	62.0	III

Relationship between knowledge & adoption gap in fodder production technology.

The study, it was established and as shown in Table 3, that the correlation between knowledge gap and adoption gap was highly significant ($P<0.01$) and positive (range as 0.547 to 0.953). The increase in knowledge gap leads to increase in the adoption gap in fodder crops for both berseem and sorghum as fodder. Thus, with the increase in the knowledge by personnel interaction method, Demonstration, group discussion and Maas media etc, the ultimate technology gap will be reduced.

Table 3: Correlation between knowledge gap & adoption gap in fodder production technology in Berseem and Sorghum fodder crop.

District	Berseem crop r (Co-relations)	Sorghum crop r (Co-relations)
Jhansi	0.946	0.923
Lalitpur	0.848	0.952
U.P.	0.869	0.947
Tikamgarh	0.621	0.953
Datia	0.748	0.895
M.P.	0.794	0.949
Bundelkhand	0.547	0.948

CONCLUSION

Based on the findings, it can be inferred that small land holding followed by lack of irrigation were the primary constraint for less adoption of fodder technology in study area. The main reasons for less Knowledge of fodder production technologies were lack of awareness about improved technologies followed by lack of on-farm guidance/training, lack of lesser resources and lesser literacy. The correlation between knowledge gap and adoption gap was highly significant and positive.

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REFERENCES

Mekoya, A., Oosting, S. J., Fernandez-Rivera, S., & Van der Zijpp, A. J. 2008. Farmers' perceptions about exotic multipurpose fodder trees and constraints to their adoption. *Agroforestry systems,* 73(2), 141-153.

Kumar, A., Singh, M., Suman, M., & Sharma, P. 2009. Constraints Faced by Dairy Farmers and Their Effect on Milk Production in Rural Areas of Jhansi District of UP. *Indian journal of Dairy Science,* 62(2), 135-139.

Barshila, I., Devkota, N. R., & Bassila, S. R. 2013. Perception of smallholder farmers on fodder tree utilization and management for livestock production in the mid-hills of Nepal. *J. Anim. Prod. Adv,* 3(10), 290-300.

Manju Suman, Ashok Kumar, Vikas Kumar, Mahavir Singh and Mallayya 2012. Farmers' perception towards fodder production in irrigated and rainfed region. National Symposium on Sustainable Production of Forages from arable and non arable land and utilization. Nov. 2-3, 2012. Organized by RMSI at IGFRI Jhansi.p93.

Kumar, M., Singh, R. P., & Misra, A. K. 2015. Adoption level of green fodder production practices and constraints faced by the farmers of Rajasthan. *Range Management and Agroforestry,* 36(2), 217-220.

Kristjanson, P., Okike, I., Tarawali, S., Singh, B. B., & Manyong, V. M. 2005. Farmers' perceptions of benefits and factors affecting the adoption of improved dual-purpose cowpea in the dry savannas of Nigeria. *Agricultural Economics,* 32(2), 195-210.

Satyapriya, R. K. Agrawal. P. Sharma and M. Singh. 2013. Knowledge level of fodder cultivating farmers about berseem production technology. *Range Management and Agroforestry,* 34, 73-76.

Suman, M. 2008. Participation of rural Women under household and farm activities. *Indian J. Agric. Res.* 42 (1), 37-41.

Suman, M., LAL SUMAN, M. B., & Singh, M. 2006. Knowledge and constraints of farmers and farm women on fodder production technology. *Guru Nanak Journal of Sociology,* 27(1), 113-122.

Suman, M., LAL SUMAN, M. B., & Singh, M. 2006. Knowledge and constraints of farmers and farm women on fodder production technology. *Guru Nanak Journal of Sociology,* 27(1), 113-122.

Suman, M., Singh, M., Kumar, A. and Mallayya 2007. Constraints perceived by farmers in use of information in relation ton fodder production technology in Jhansi district. *Range Mgmt & Agro forestry,* 28(2), 196-197.