



## An appraisal of area possessed under forage and pastures by dairy and non dairy farmers in district Mandi, Himachal Pradesh

Akesh Kumar<sup>1</sup>, \*Maharaj Singh<sup>2</sup>, J. P. Upadhyay<sup>2</sup>

<sup>1</sup>Bundelkhand University, Jhansi, U.P., India

<sup>2</sup>ICAR-Indian Grassland and Fodder Research Institute, Jhansi, U.P., India

\*Corresponding email: [singhmaraj51@gmail.com](mailto:singhmaraj51@gmail.com)

ARTICLE INFO	ABSTRACT
<b>Short Communication</b> Received on February 15, 2017 Accepted on April 26, 2017  <b>Article Authors</b> Akesh Kumar, Maharaj Singh, J. P. Upadhyay <b>Corresponding Author Email</b> <a href="mailto:singhmaraj51@gmail.com">singhmaraj51@gmail.com</a>	The study was undertaken in three blocks of district Mandi and data were collected about the level of knowledge among dairy and non dairy farmers in district Mandi of Himachal Pradesh. The study reported that the highest average area under cultivated fodder found in Maize crop (0.44ha) followed by Oats (0.25ha), Sorghum (0.16ha) and Berseem (0.15ha) while per non dairy farmer the highest area (0.16ha.) recorded under Maize followed by (0.13ha) Oats, Berseem (0.11ha) and (0.08ha) under Sorghum. As the area possessed under pastures the dairy farmers noticed highest area (0.96ha.) under common pastures followed by (0.68ha) family pasture and (0.24ha). Under hortipastures while in case of per non dairy farmers the highest area (0.93ha) was found under family pasture followed by (0.91ha) common pasture and 0.36ha in hortipasture. As regards to percent area per dairy and non dairy farmers is concerned; the dairy farmers possess more area (14.17%) compared with non dairy farmers (8.43%) in forage crops while non dairy farmer possess more area (34.42%) in pasture compared to dairy farmers (26.65% area). The reasons possessing more area by non dairy farmers under pasture that the maintenance and quality of pastures was not found proper and not getting sufficient fodder out of such pastures.
<b>PUBLICATION INFO</b> International Journal of Agricultural Invention (IJAI) <b>RNI:</b> UPENG/2016/70091 <b>ISSN:</b> 2456-1797 (P) <b>Vol.:</b> 2, <b>Issue:</b> 1, <b>Pages:</b> 47-49 <b>Journal Homepage URL</b> <a href="http://agriinventionjournal.com/">http://agriinventionjournal.com/</a> <b>DOI:</b> 10.46492/IJAI/2017.2.1.11	<b>KEYWORDS</b> Fodder Crops, Dairy Farmers, Hortipasture

### HOW TO CITE THIS ARTICLE

Kumar, A., Singh, M., Upadhyay, J. P. (2017) An appraisal of area possessed under forage and pastures by dairy and non dairy farmers in district Mandi, Himachal Pradesh, *International Journal of Agricultural Invention*, 2(1): 47-49. DOI: 10.46492/IJAI/2017.2.1.11

The natural grass lands are the primary source of fodder for live stock in Himachal Pradesh (Singh and Sood, 1997). The dairy farming in Himachal Pradesh contributes about 20-30% of household income. Due to low productivity of land and marginal holdings, livestock reconsidered away of lifting the quality of life of rural masses in the state. Forage, livestock status in temperate west zone of Himachal Pradesh has documented that the average land holding size varied from 0.52-5.52 ha are with the predominance of small and marginal farmers (Sharma and Jindal, 2002). The small farmers still has poor information inputs chiefly because of their lower socio economic status (Baldeo and Kushwaha, 2002). The adoption gap was found higher among marginal farmer than small farmer and at the same time the adoption gap was found to be higher among small farmer then large farmers (Khan and Chauhan, 2005). The main source of fodder in the region are natural grasslands, meadows, forest lands, crop residues, waste lands, orchards and cultivated fodder, field bunds, weedy growth in field crops, but they are hardly enough to meet the forage demand of even 50% of the existing livestock population. Natural

grasslands are the primary source of fodder for livestock in the state and total area for grazing is about 32 lakhs ha which comes to 56.7% of the total geographical area of state and out of total geographical area only 11.3% is under cultivation and mostly 4% termed as cultivable waste another can be further brought under cultivation and cultivable forage crops in the state is only 8000 ha for increasing forage production and to have regular supply of green fodder throughout the year. The area under superior varieties of forage crops needs to be increase (Census, 1991). Shinde *et al.* (1998) reported that a considerable gap between the present practice of dairy farmer and available animal husbandry technology. Therefore, considering the above aspect in view the study was conducted.

### METHODOLOGY

The district Mandi of Himachal Pradesh was selected purposively as because of being the mixed farming practiced extensively. Out of ten blocks of district Mandi three (Rewalsar, Sunder Nagar and Sadar) and ten villages from each block (Five villages where dairy practiced extensively and the other five where dairy is not major occupation) were

selected randomly. Thus three blocks consists of 30 villages and 5 farmers from each village selected and the whole sample became of 150 farmers (75 dairy and 75 non dairy farmers). The forage crops like maize, Sorghum, Berseem and Oats and Pastures have been taken for study.

## RESULTS AND DISCUSSION

The (Table 1) clearly described the average area under forage crops possessed by the dairy and non dairy farmers. On an average the dairy farmers have 0.44 ha area under Maize crop, followed by 0.25 ha Oats, 0.16 ha Sorghum and 0.15 ha area under Berseem crop while non dairy farmers had highest 0.16 ha area followed by 0.13 ha Oats, 0.11 ha Berseem and 0.08 ha area under Sorghum. While discussing the area under different pastures it was observed that highest 0.96 ha area per dairy farmer possessed under common pastures followed by 0.06 ha area family pasture and 0.24 ha area under hortipasture. As regards to non dairy farmers the average highest area found 0.93 ha under family pasture followed by 0.91 ha area in common pasture and 0.36 ha under hortipasture (Table 2). It is interesting to note that the dairy farmers on an average found 14.17% area engage under forage crops and 26.65% area under pastures of their holdings while non dairy farmers 8.43% under forage crops and 34.42% area under pastures of their lands (Table 3). The reason behind engaging more area under pastures by non dairy farmers was that the maintenance and quality of pastures not found proper and not getting sufficient fodder from such pastures.

**Table 1. Average area under different forage crops among dairy and non dairy farmers**

S. N.	Crops	Av. area (ha.) / dairy farmer	Av. Area (ha.) / non dairy farmer
1.	Maize	0.44	0.16
2.	Sorghum	0.16	0.08
3.	Berseem	0.15	0.11
4.	Oats	0.25	0.13

**Table 2. Distribution of area under different types of pastures among dairy and non dairy farmers**

S. N.	Area under pastures	Av. Area (ha.) /dairy farmer	Av. Area (ha.) /non dairy farmer
1.	Area under family pasture	0.68	0.93
2.	Area under common pasture	0.96	0.91
3.	Area under hortipasture	0.24	0.36

**Table 3. Distribution of percent area under different forage and pastures**

S. N.	Forage/pasture	Percent area/ dairy farmer	Percent area / non dairy farmer
1.	Forage crops	14.17	8.43
2.	pastures	26.65	34.42

## CONCLUSION

The study reported that the dairy farmers possessed more area compared to non dairy farmers under forage crops. The dairy farmers found having highest acreage under common pastures followed by family pastures and hortipasture while non dairy farmers had highest average area under family pasture followed by common pastures and hortipasture. When compared the area under forage crops and pastures engaged by dairy and non dairy farmers it was found that dairy farmers have more area under forage crops and non dairy farmers had more area under pastures. The pastures of non dairy farmers not producing sufficient fodder because of poor maintenance while dairy farmers maintain the pastures better and produce more fodder compared to non dairy farmers.

## REFERENCES

- Khan, P. M. and Jitendra C. (2005) Adoption gap in improved technology of animal husbandry. *Ind. Res. J. of ext. edu.*, 5(1): 63-65.
- Sharma, J. R. and Jindal, K. K. (2002) Carrying capacity of selected grasslands of Shimla district in temperate west zone Himachal Pradesh, fodder animal relationship of different land holdings. National symposium on grass land and fodder research in the new millennium, pp. 160-161.
- Singh, C. M. and Sud, V. K. (1997) package of practices for kharid crops, H. P. K. V. Palampur, pp. 67-69.
- Singh, B. and Kushwaha, R. K. (2002) Characteristics of small farmers and adoption of modern farm technology, *Indian Research J. of Exten. Education*, 2(1): 44-47.
- Shinde, V. K. (1998) Adoption of improved dairy practices by diary farmer"s, *Maha J. of ext. edu.*, 17: 144-151.

**Manuscript received on Feb 15, 2017, Accepted for publication on April. 26, 2017**