

## RESEARCH NOTE

## Efforts of Livestock Farmers in Conservation of Indigenous Cattle Breed – Kherigarh

A.K. Verma<sup>1</sup> and Niranjana Lal<sup>2</sup>

1 Ph.D. Scholar (Ext.Edu.), IVRI, Izatnagar, 2. Scientist, TOT Section, CARI, Izatnagar, Uttar Pradesh

Corresponding author e-mail: [lal\\_niranjana@yahoo.co.in](mailto:lal_niranjana@yahoo.co.in)

### ABSTRACT

*In the race of modernization of agriculture the use of mechanical power increased but draught animal power (DAP) still continues to be used on Indian farms due to small holdings and less availability of resources to the farmers. In that view the present investigation was carried out to study the farmer's efforts toward conservation of Kherigarh, an indigenous draught breed of cattle. A total of 120 respondents from the native tract of this breed were interviewed using a well-structured interview schedule. Obtained data revealed that the suitability of this breed in flooded area made the livestock farmers rear this breed despite a low milk productivity of animals. Farmers are utilizing natural service to conceive their animal which is necessary for preventing dilution of the breed. Farmers are also involved in marketing and diffusing this breed in neighboring areas. They also provide suggestion for provision of a good bull in each village along with appreciation of livestock farmers by government, loan for the purchasing of animals of this breed and maintaining a good farm of this breed for demonstration. Majority of the livestock farmers suggest the involvement of government in promoting both Kherigarh breed as well as livestock farmers involve in the rearing of the breed. Their suggestions will provide guidance and understanding to government and policy makers for developing programmes for conservation and improvement of this Indigenous breed.*

**Keywords:** Conservation; Efforts; Indigenous breed; Suggestions;

The conservation of biodiversity, particularly animal genetic resources has now become, national as well as global concern. Earlier, several efforts were made to conserve the species of plants and animals especially wild animals while domestic animal genetic resources received attention for conservation very late. The Indian cattle population is 199.08 million, out of which 166.02 million (83.56 %) are indigenous cattle and the rest (33.06 million) are classified as crossbred. Most of the breeds developed in India are either draught type or dual purpose. Despite mechanization of agriculture, draught animal power (DAP) continues to be used on Indian farms due to small holdings and less availability of resources. More than 55% of total cultivated area is still being managed by draught animals against about 20% by tractors (Phaniraja, 2009). Kherigarh, one of the 34 recognized indigenous breed of cattle, evolved as a draught breed over centuries and has become adapted to harsh native environment, acquiring resistance to tropical diseases and ability to survive on low quality roughage and grasses. The name, Kherigarh, stemmed from Kherigarh village of district

Lakhimpur Kheri. Being a draught it is very important for Indian farmers engaged in agriculture sector. Animals of this breed are primarily employed for agricultural operations and transportation. The breeding tract of this breed is Lakhimpur (Kheri) district of Uttar Pradesh, which lies in the foothills of the Himalayas. The breed is primarily maintained by small, marginal and landless labourers. Bullocks are fast and good for light weight carting and agricultural operations. The estimated size of the Kherigarh population in the India is 171414 out of which 134844 animals are present in Lakhimpur (Kheri) district of UP. According to NBAGR, animals of this breed are declining sharply in their native tract due to ignorance of breed by state government and lack of suitable breeding policies. For that it is needed to analyze the efforts of livestock farmers towards conservation of this breed.

### METHODOLOGY

Present study was carried out in Lakhimpur (Kheri) district of the Uttar Pradesh. Under this study Pallia and Nighasan blocks of district Lakhimpur (Kheri),

were selected purposively because these blocks are native tract for this breed and have the highest number of animals of this breed, (Singh et al., 2002). From each selected block three clusters of villages were selected randomly for the study. In this way total 6 clusters were selected for study. From each cluster of village, 20 livestock farmers rearing minimum two Kherigarh cattle one male and one female with minimum 2 year of experience were selected randomly and they were interviewed with the help of an interview schedule keeping in view the objectives of the study After collection, data were compiled, tabulated and analyzed by using cumulative square root frequency method for stratification of livestock farmers on the basis of their experience in rearing animals of this breed.

*Efforts made by livestock farmers in conservation of this breed:* Efforts of livestock farmers for conservation of this breed are enlisted in Table 1. Livestock farmers were rearing Kherigarh cattle despite low milk productivity of animals and utilizing natural service (86.66%) to conceive their animal which is necessary for preventing dilution of the breed. Farmers are also involved in marketing and diffusing (85.00 %) this breed in neighbor districts and areas. They give preference to this breed for agricultural work (78.33%) especially those who have small land holdings. Farmers are also engaged in calf rearing practices for better survival of the young calf (61.66%) and after maturity utilized them for breeding and agriculture.

*Suggestions:* Suggestions given by livestock farmers for conservation of this breed are enlisted in Table 2.

**RESULTS AND DISCUSSION**

**Table 1. Efforts made by livestock farmers for conservation of breed (N=120)**

Efforts	Rearing Experience (in years)			Total
	Low (35)	Medium(46)	High(39)	
Perform natural service	74.28	91.30	92.30	86.66
Keeping your own bull of Kherigarh breed	2.80	6.50	20.51	10.00
Utilizing male calf in breeding purpose	20.00	10.86	48.71	25.80
Make publicity of breed	48.57	73.91	84.61	70.00
Maintaining herd of this breed	11.42	34.78	28.20	25.80
Avoiding cross breeding	0.00	19.56	43.58	21.66
Selling of bull in local market	80.00	84.78	89.74	85.00
Preference to this breed for agricultural work	71.24	89.13	71.79	78.33
Rearing Kherigarh cow in spite of low productivity	100	100	100	100
Giving importance to calf rearing for better survival	22.85	73.91	82.05	61.66

(Data in Table are expressed in percentage)

**Table 2. Suggestions for conservation of this breed (N=120)**

Suggestions	Rearing Experience (in years)			Total
	Low (35)	Medium (46)	High (39)	
Provide loan to purchase Kherigarh breed	99.28	91.30	94.87	93.33
Appreciation of livestock farmers by government	100	100	100	100
Develop special programme	65.71	80.43	79.48	75.80
Organizing motivational camp	80.00	56.52	25.64	53.33
Facilitate SHG for purchasing this breed	34.28	84.78	46.15	57.50
Maintain a good farm of this breed for demonstration	88.57	78.26	97.43	87.50
Provide a breeding bull in each village panchayat	100	100	100	100
Provide semen of Kherigarh breed at AI centers	68.57	65.21	51.28	61.66
Castration of non descript male to check indiscriminate breeding	80.00	60.86	92.30	76.66

(Data in Table are expressed in percentage)

All livestock farmers suggested for providing a proven bull in each village panchayat along with appreciation of livestock farmers by government, loan for the purchasing (93.33%) of animals of this breed, maintaining a good farm of this breed (87.5%) for demonstration. They also suggested for castrating nondescript male (76.66%) to check indiscriminate breeding and developing some special programmes (75.8%) for conservation along with availability of Kherigarh semen at A.I. centers (61.66%). Involvement and facilitation of self help group and organization of motivational camp (53.33%) also suggested for conserving this breed.

## CONCLUSION

In the view of importance of Kherigarh cattle in the life of livestock farmers living in highly flooded area of district Lakhimpur (Kheri), the present study provided a useful view on farmers' efforts in conservation of this indigenous breed. Being draught cattle, animals of

this breed are highly suitable for agricultural work and provide draught animal power (DAP) to the livestock farmers and they become able to manage their small agricultural land without spending too much cost for it. Cows of this breed are poor milk producers but able to fulfill the family milk requirement of poor livestock farmers and can maintain on zero input system. Most of the livestock farmers directly or indirectly make the efforts to conserve this breed. They also give some suggestions for promoting the breed conservation. Majority of the livestock farmers suggest the involvement of government in promoting both Kherigarh breed as well as livestock farmers to be involved in the rearing of the breed. So, government and policy makers should start some conservation and breed improvement programmes with effective implementation in the native area of this breed.

*Paper received on* : May 20, 2014

*Accepted on* : June 23, 2014

## REFERENCES

- A. K. Pandey, R. Sharma, Y. Singh, B.B. Prakash and S.P.S. Ahlawat (2006). Genetic diversity studies of Kherigarh cattle based on microsatellite markers. *J. of Genetics*, **85** (2):117-122.
- A. Singh, G. K. Gaur, P. K. Singh and R.K. Pundir (2002). Project title: characterization and evaluation of Kherigarh cattle in its native tract-A pilot study. NBAGR annual report 2001-02, pp13-15
- K. L. Phaniraja and H. H. Panchasara (2009). Indian draught animal power. *Veterinary world*, **2** (10): 404-407.
- N. Akila and M. Chader (2009). Farmer's Attitude towards utilization of draught bullocks in Indian agriculture. *Livestock Res. for Rural Devl.* **21** (5):76.
- R. Sahai (2001). Sustainability and conservation of farm animal genetic resources, challenges in India. Proc. Intl. Conf. on Sustainable Animal Production, Health and Environment: Future Challenges. CCS Haryana Agricultural. Univ. Hisar India 1: 258-271.

