

AN ANALYSIS OF IMPROVED BREEDING PRACTICES OF FARMERS IN ASSURED AND LESS IRRIGATED AREAS

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ABSTRACT

This study was conducted in Aligarh district of Uttar Pradesh in order to comprehensive analysis of breeding practices those followed by the farmers. A sample of 300 farmers were selected from both the areas for this study. The main objective of this segment of study was to see the extent of adoption and rank order of improved breeding practices. The results showed that considerable number of improved breeding practices adopted by all farmers i.e. treatment of repeat breeding and anoestrus cases by a veterinarian having A.I. done at proper time of heat and having the cow served within 60 to 90 days after calling, but in case of pregnancy diagnosis between 60 to 90 days after serving their animal and adoption of natural service with the superior bull were very eligible.

Key words : Improved breeding practices, Pregnancy, Adoption, Bull.

INTRODUCTION :

We know that prosperity of India as a nation undoubtedly depends on the advancement and success achieved in agricultural sector of which dairying is an important component and playing an important complementary role in improving socio-economic conditions of rural masses. Agriculture and dairying have been inseparable and contributed to the sustainability of rural countryside. The dairying sector provides some 70 million farm families the triple benefits of nutritive food, supplementary income and productive employment for family labour. As India entered into an era of economic reforms, agriculture, particularly the livestock sector and dairying are to be major growth areas. Planners in India have been targeting dairying as a tool for bringing about the socio-economic transformation in the rural sector.

Though India has made significant achievement by attaining the status of world's largest milk producer with 88 million tones (Rai, 2003). This may be due to proper adoption of improved dairy husbandry practices like adoption of artificial insemination, natural service with the superior bull, pregnancy diagnosis and serving the animals between 60 to 90 days after calving.

METHODOLOGY :

Six blocks out of 12 blocks have been selected from the purposively selected Aligarh district of the Uttar Pradesh. The district was divided into two parts according to their homogeneity i.e. more fertile and having assured irrigation facilities and another having less fertile and less irrigation facilities. Three blocks from each parts (i.e. total 6 blocks) and two village from each block (i.e. 12 villages) were selected by stratified random sampling. A total of 300 farmers (25 farmers from each village) constituted the sample for the proposed study. An

interview schedule was structured for the purpose of data collection from the respondents.

RESULTS AND DISCUSSION :

Adoption of breeding practices: Tables 1 showed that majority of the farmers (61.33 and 71.33%) were in the medium adopter category from both assured irrigated and less irrigated area, respectively. In assured irrigated area, 34.67 percent farmers had high (34.67%) level of adoption of breeding practices and negligible (1.34%) in less irrigated area. In contrast, whereas only 4.00 percent of farmers in assured irrigated area had low level of adoption, while there was 31.33 percent in less irrigated area within category. In pooled sample, majority of the farmers (66.34%) had medium level of adoption followed by 36.00 and 31.33 percent in high and low category of adoption, respectively. This finding was in agreement with those of Chugh (1995) who observed that majority of the respondents fell in medium category of adoption of breeding practices. It could be concluded that adoption of IDHPs was higher in assured irrigated area in comparison to less irrigated area.

Table 1. Distribution of farmers according to adoption of improved breeding practices

S.No.	Category (scores)	Assured Irrigated (N=150)	Less Irrigated (N=150)	Pooled (N=300)
1	Low (<8.94)	6 (4.00)	41 (27.33)	47 (31.33)
2	Medium (8.94-12.92)	92 (61.33)	107 (71.33)	199 (66.34)
3	High (>12.92)	52 (34.67)	02 (01.23)	54 (36.00)

Figures in parenthesis indicate percentage

Practice-wise extent of adoption of improved breeding practices—Table-2, showed that majority of the farmers (88.67%) in assured irrigated area got their animal treated by the veterinary officers in case of

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anoestrus and repeat breeding, followed by 46.67 percent practiced A.1 at proper time of heat. Whereas, 26.66 percent farmers in the less irrigated area continuously adopted natural service with superior bull, followed by A.1. (16.67%). The least adopted practice was the pregnancy diagnosis in assured irrigated and less irrigated area (12.0% and 1.33%), respectively. In assured irrigated area, majority of farmers (67.33%) rejected the pregnancy diagnosis after adoption, followed by 47.33% percent served animals within the time. Equal percentage (66.67% and 66.67%) of farmers rejected the pregnancy diagnosis and repeat breeding and anoestrus in less irrigated area, whereas, 68.00 percent farmers were found

in case of cow served. In pooled sample, 47.67 percent farmers continuously got their animal treated in case of repeat breeding and anoestrus by veterinary officers. A less than one-third farmers adopted A.I. in their animals. The findings were in agreement with jha (1998) who reported that majority of the farmers treated their animals by veterinary officers in case of pregnancy diagnosis. The finding was also in concordance with that of Sah (1999) that also reported only 7.5 percent farmers were found dependent on Livestock Extension Officers (LEO) for pregnancy diagnosis. About 59 percent farmers did not practiced natural service with superior bull.

Table 2. Distribution of farmers according to extent of adoption of improved breeding practices

SN	Assured irrigated Practices	(N=150)			Less irrigated (N=150)			Pooled (N=300)		
		Continued adoption	Rejected after adoption	Not adoption	Continued adoption	Rejected after adoption	Not adoption	Continued adoption	Rejected after adoption	Not adoption
1.	Having A.I. done at proper time of heat	70 (46.47)	54 (36.00)	26 (17.33)	24 (16.00)	78 (52.00)	47 (31.33)	95 (31.67)	132 (44.00)	73 (24.33)
2.	Having the cow served within 60 to 90 days after calving	68 (45.33)	71 (47.33)	11 (07.34)	04 (02.67)	102 (68.00)	44 (29.33)	72 (24.00)	173 (57.67)	55 (18.33)
3.	Having pregnancy diagnosis done between 60 to 90 days after service	18 (12.00)	101 (67.33)	31 (20.67)	02 (01.33)	100 (66.67)	48 (32.00)	20 (06.67)	201 (67.00)	79 (26.33)
4.	Treatment of repeat breeding and anoestrus cases by a veterinarian	133 (88.67)	15 (10.00)	02 (01.33)	10 (06.67)	100 (66.67)	40 (26.66)	143 (47.67)	115 (38.33)	42 (14.00)
5.	Do you follow the natural service for their animals with superior bull	10 (06.67)	49 (32.67)	91 (60.66)	40 (26.66)	25 (16.67)	85 (56.66)	50 (16.67)	74 (24.67)	176 (58.66)

Mean difference in adoption of improved breeding practices: It could be seen from table-3 that both the samples were having highly significant difference in adoption of breeding (t=139.54) practices. It could be concluded from the findings that adoption of breeding practices was high in assured irrigation area which might be due to more extension contacts and high knowledge about IDHPs and favourable attitude towards dairy farming. The highly significant difference in adoption of these practices would have resulted in high milk production and assured irrigation availability, large number of AI centers in assured irrigated area.

Table 3. Mean difference in adoption of improved breeding practices

Practice	Assured irrigated area		Less irrigated area		t-value
	Mean	SD	Mean	SD	
Breeding	12.03	1.54	9.83	1.78	139.54**

** Significant at 1% level

From the above results, it could be concluded that irrespective of area, their knowledge level about the IDHPs could be improved by enhancing their extension contact, mass media exposure, attitude towards dairy farming and membership of village dairy cooperative.

CONCLUSION :

From the above discussions, it could be concluded that majority of the farmers (66.34%) had medium level of adoption followed by 36.00 and 31.33 percent in high and low category of adoption, respectively. Majority of farmers continuously got their animal treated in case of repeat breeding and anoestrus by veterinary officers. A less than one-third farmers adopted A.I. in their animals. It could be concluded from the findings that adoption of breeding practices was high in assured irrigation area which might be due to more extension contacts and high knowledge about IDHPs and favourable attitude towards dairy farming.

REFERSENCES

1. Chug, M. (1995). An exploratory study of dairy farms owned by ex-servicemen in Karnal district (Haryana). M.Sc. Thesis, NDRI (Deemed University), Karnal.
2. Jha, D.N. (1978). Economic constraints in trasfer of technology : Hypothesis, processing of workshop cum-training course in methodology of constraints analysis held at IARI, New Delhi, Nov., 1978, P.P. 6-11.
3. Rai, M. (2003). Fifth convocational address, 9 August, 2003 NDRI, Karnal.
4. Sah, U. (1999). An analysis of dairy animal breeding and management practices in hill zone of U.P. A gender perspective. Ph.D. Thesis (Unpublished), NDRI, Karnal.

