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To Study The Occupational And Human Labour Utilization From Dairy Enterprise On Different Farm Size Groups

A Sharma, K V Vidyarthi, J Singh, P K Sharma & M K Lavania
Department of Agricultural Economics, Nagaland University, SASRD Medziphema: Campus — 797 106.

ABSTRACT

In case of human labour employment, It was observed that the average man, women and child labour use per household per annum was 120, 66 and 22 days (man equivalent days) on beneficiary households as against 114, 64 and 19 days on non-beneficiary households. It also observed that women's participation in dairying was higher than that of men and children on small cattle holding of beneficiary households.

Key words : Beneficiary, Dairy enterprise, Farm size groups, Human labour, Milch animal,Non beneficiary

Dairying is generally assumed to be a profitable complementary enterprise to agriculture and constitutes an important enterprise for the rural economy of India. The Indian Dairy Industry establishes the most important off-farm activity and provides vast opportunities for securing gainful employment and income to weaker sections of the community. This sector has been poor, mainly because of a weak co-operative structure at the village level through which milk in adequate quantities could not be collected (Sharma, 1993).

The nutritional expends of the Indian Council of Medical Research have recommended 300 of milk for preschool children, 250 for school children in the age group of 7-12 years and for boys and girls from 13-18 years of age and 200 grams per adult man and woman (Anonymous 2001).

During the planned era, cumulative expenditure on various dairying programmes in Uttar Pradesh added or summed to Rs. 18.51 crores up to 1979-80. By the end of 1980-81, the number of milk plants rose to 26 and daily handling of milk increased to 2, 30, 000 liters (Anonymous 1992).

Kurien (1971) reported that dairy cooperatives have the capacity to generate substantial employment opportunities in rural areas. Each milk union employs hundreds of skilled and unskilled workers and every village society employs 3 to 10 persons depending upon the volume of milk handled.

Singh *et al* (1981) examined the impact of dairy cooperatives on employment in the milk-shed area of milk plant, Ludhiana. The study reveled that besides providing additional employment to milk producers, large scale employment was generated in procurement and marketing of milk and milk products.

Biradar (1989) studied that the increase in the capital investment because of increased consumption of raw material. As the impact of dairy development on rural households including income, employment, assets improvement and milk consumption in Udgir Taluka, Latur District of Maharashtra for study sample included 97 respondents benefiting from dairy farming. Income from dairying significantly contributed to the total income of respondents, particularly to the poorer ones. Large farmers were spending more time on dairying than other households. The beneficiaries who had made dairying their main occupation spent more time on dairy production. Due to adoption of dairy farming the assets of beneficiaries improved significantly. The personal characteristic of milk producers like age, education, caste, size of family and occupational structure of households were found to be determining factors for dairy development.

Therefore, the present studies endeavors to study the occupational and human labour utilization from dairy enterprise on different farm size groups.

MATERIAL AND METHODS

For the present study, a three stage sampling technique was adopted. In the first stage, Etawah milk shed was selected purposively. Secondly five (5) milk routes with four (4) primary milk co-operative societies (total twenty) were selected randomly. While in the third stage of sampling it is classified into two groups, i. e, beneficiaries and non-beneficiaries (100 each) and again both groups were classified into three categories, *viz*, small (one milch animal), medium (two to three milch animals) & large (three and more milch animals) respectively. The information of all aspects from producers was

Table 1: Distribution of Sample Households.

S. N.	Category of cattle holding	No.of milch animals	Beneficiary households	Non-beneficiary households
1	Small	Up to 1	32	34
2	Medium	2 to 3	41	45
3	Large	3 and above	27	21
	Total	-	100	100

Conversion Index : 1 Male labour = 2 Child labour.
2 Male labour = 3 Women labour.

Table 2: Occupational Distribution of Sample Households.

S. N.	Category of Cattle holding	Agriculture	Dairying	Labour	Service	Business	Others	Total
A.	**Beneficiaries**							
1	Small	15.63	4.23	27.88	31.50	17.64	3.12	100.00
2	Medium	54.03	20.50	9.44	11.07	3.52	1.44	100.00
3	Large	64.44	23.05	-	-	9.11	3.40	100.00
Overall		44.55	15.98	12.79	14.62	9.55	2.51	100.00
B.	**Non-Benificiaries**							
1	Small	17.65	-	28.53	20.41	25.53	7.88	100.00
2	Medium	46.00	16.43	10.67	9.78	12.68	4.44	100.00
3	Large	67.10	21.10	-	-	17.04	4.76	100.00
Overall		40.79	11.82	14.50	11.34	15.87	5.68	100.00

collected by personal interview method, during the period of 2001-02. The number of sample households thus finally selected from each category is given in the Table 1.

RESULT AND DISCUSSION

The main finding of this study related to evaluate the economic viability of dairy enterprise and the overall occupational distribution of the sample households. Table 2 reveals that the agriculture to be the major occupation on both beneficiary (44.55 per cent) and non-beneficiary households (40.79 per cent) with the dairy farming only as a subsidiary occupation in case of both beneficiary (15.98 per cent) and non-beneficiary households (11.82 per cent) respectively.

While on the beneficiaries household the highest percentage was belongs to service (31.50 per cent) whereas the lowest belongs to dairying (4.23 per cent) followed by others (3.12 per cent) on small cattle holding. While on the medium category of cattle holding the highest percentage was belongs to agriculture (54.03 per cent) whereas the lowest belongs to dairying (3.52 per cent) and others (1.44 per cent). On the large category a cattle holding it was recorded to be highest percentage of agriculture (64.44 per cent) and it was found to be lowest on others (3.40 per cent) respectively.

While on non-beneficiaries household of small cattle holding the highest percentage was belongs to labour (28.53 per cent) whereas it was recorded to lowest on agriculture (17.65 per cent) followed by others (7.88 per cent), whereas on medium category of cattle holding the highest percentage was belongs to agriculture (46.00 per cent) whereas the lowest belongs to service (9.78 per cent) and others (4.44 per cent). While on the large category a cattle holding it was recorded to be highest percentage of agriculture (67.10 per cent) and it was found to be lowest on others (4.76 per cent) respectively.

With a view to assess the extent of participation of family and hired labour of men, women and children, data of labour use per household on different categories of cattle holdings have been analysed and are presented in the table 3. The average human labour use in dairy enterprise on beneficiary and non-beneficiary households has been about 207 days and 196 days respectively which is smaller than the figure of 301 days as reported by Singh *et. al* (1981) [9].

A close examination of the table reveals the total labour use across cattle holding of both the groups to be showing an increasing trend for obvious reasons. The average man, woman and child labour use per household on beneficiary

Table 3: Family and Hired Human Labour utilization during the year (man equivalent)

Type of labour	Beneficiaries				Non-Beneficiaries			
	Small	Medium	Large	Overall	Small	Medium	Large	Overall
(A) Family Labour								
Man	42.85	110.21	124.09	92.40	38.76	109.35	125.12	88.66
Woman	44.81	6.33	71.24	58.34	44.38	58.53	68.36	55.78
Child	12.61	19.04	14.57	15.76	10.39	15.31	15.01	13.57
Sub-Total	100.37	189.58	209.90	166.50	93.53	183.19	208.49	158.01
	(100.00)	(79.45)	(73.26)	(80.33)	(100.00)	(77.96)	(73.23)	(80.49)
(B) Hired Labour								
Man	-	35.76	46.10	27.10	-	33.97	45.91	24.92
Woman	-	5.27	20.14	7.59	-	8.89	21.06	8.42
Child	-	8.01	10.32	6.07	-	8.92	9.24	4.95
Sub-Total	-	49.04	76.62	40.76	-	51.78	76.21	38.29
	-	(20.55)	(26.74)	(19.67)	-	(22.04)	(26.77)	(19.51)
Total (Family + Hired)								
Man	42.85	145.97	170.25	119.50	38.76	143.32	171.03	113.58
	(42.69)	(61.17)	(59.42)	(57.66)	(41.44)	(61.00)	(60.07)	(57.86)
Woman	44.51	65.60	91.38	65.93	44.38	67.42	89.42	64.20
	(44.74)	(27.49)	(31.89)	(31.89)	(47.45)	(28.69)	(31.41)	(32.71)
Child	12.61	27.05	24.89	21.83	10.39	24.23	24.25	18.52
	(12.57)	(11.34)	(8.69)	(10.53)	(11.11)	(10.31)	(8.52)	(9.43)
Grand Total	**100.37**	**238.62**	**286.52**	**207.26**	**93.53**	**234.97**	**284.70**	**196.30**

(Figures in parenthesis indicate percentage to total)

Appendix - 1: Operation wise Human Employment per Standard Animal Unit (Hours per day).

Type of labour	Beneficiaries				Non-Beneficiaries			
	Small	Medium	Large	Overall	Small	Medium	Large	Overall
Grazing	0.47	0.54	0.36	0.47	0.60	0.71	0.52	0.63
	(21.36)	(26.34)	(20.81)	(23.38)	(29.27)	(33.81)	(30.23)	(31.50)
Bringing Fodder	0.41	0.35	0.30	0.36	0.34	0.33	0.28	0.32
	(18.64)	(17.07)	(17.34)	(17.91)	(16.59)	(15.71)	(16.28)	(16.00)
Chaff Cutting	0.20	0.18	0.17	0.18	0.16	0.16	0.14	0.16
	(9.09)	(8.78)	(9.83)	(8.96)	(7.80)	(7.62)	(8.14)	(8.00)
Feeding	0.43	0.37	0.34	0.38	0.36	0.38	0.32	0.36
	(19.55)	(18.05)	(19.65)	(17.91)	(17.56)	(18.10)	(18.60)	(18.00)
Watering	0.11	0.10	0.10	0.10	0.09	0.08	0.08	0.08
	(5.00)	(4.88)	(5.78)	(4.97)	(4.39)	(3.81)	(4.65)	(4.00)
Clearing	0.20	0.16	0.15	0.17	0.17	0.14	0.12	0.15
	(9.09)	(7.80)	(8.67)	(8.46)	(8.29)	(6.66)	(69.8)	(7.50)
Milking	0.21	0.20	0.18	0.20	0.19	0.17	0.15	0.17
	(9.54)	(9.76)	(10.40)	(9.95)	(9.27)	(8.10)	(8.72)	(8.50)
Misllanceous	0.17	0.15	0.13	0.15	0.14	0.13	0.11	0.13
	(7.73)	(7.32)	(7.52)	(7.46)	(6.82)	(6.19)	(6.40)	(6.50)
Total	2.20	2.05	1.73	2.01	2.05	2.10	1.72	2.00
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

(Figures in parenthesis indicate percentage to total)

households has been 120, 66 and 22 days respectively, accounting for about 58, 32 and 10 per cent of the total labour use respectively. In the category of family labour from the beneficiaries sector the contribution of Man is 92.40 man-equivalent units, whereas for women and child respectively the similar figures are 58.34 and 15.76 man-equivalent respectively. While the category of hired labour from the beneficiaries sectors the contribution of Man are 27.10 man-equivalent units, whereas for women and child respectively the similar figures are 7.59 and 6.07 man-equivalent respectively.

The similar figure from non-beneficiaries sector is 88.66 man-equivalents, 55.78 and 13.57 on man, women and child respectively. However, in case of non-beneficiary households the corresponding figures are 114, 64 and 19 days accounting for about 58 per cent, 33 per cent and 9 per cent of the total labour use respectively. In the category of family labour from the non-beneficiaries sector the contribution of Man is 88.66 man-equivalent units, whereas for women and child respectively the similar figures are 55.78 and 13.57 man-equivalent respectively. Also, the category of hired labour from the non-beneficiaries sector the contribution of Man is 24.92 man-equivalent units, whereas for women and child respectively the similar figures are 8.42 and 4.95 man-equivalent.

CONCLUSION

The households engaged in dairying of commercial nature have been observed to be constituted of about 16 & 12 per cent of all the occupations, followed by the beneficiary and non-beneficiary household respectively. The study has also suggested that there has been seen no occupational barriers against cattle keeping, since dairying has not been practiced as an independent occupations on most of the households understudy.

It is interesting to note that the percentage share of Women labour has declined with an increase in the size of cattle holding of beneficiary and non-beneficiary households. It has further been observed that woman's participation in dairying is greater than that of man and children, on small cattle holdings of beneficiary households. On the other hand, children participation has been seen to be higher on the cattle holdings of non-beneficiary households as compared to that in beneficiary ones.

It may thus be inferred that human labour employment has been higher on the cattle holdings of beneficiary households as compared to that of non-beneficiary households, indicating there by a positive impact of human labour employment in dairying enterprise

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