



Nutritional security and calorie intake through Mini Dairy Unit in rural area farmers at Y.S.R. Kadapa District

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Abstract:

Dairy farming plays a vital role in economic sustainability , employment and nutritional security of rural farmers. The livestock sector has witnessed a phenomenal growth especially in the last decade owing to increased demand for food and food products of animal origin. In India majority of rural households belong to small and marginal farmers in terms of land and animal holding. In Andhra Pradesh in order to create employment , income generation and nutritional security Govt of Andhra Pradesh ,A.H. Department implemented Mini Dairy scheme in drought prone area like Y.S.R. Kadapa district. 2 Murrah buffaloes were given to farmers on subsidy and their nutritional security and calorie intake were calculated through information obtained by structured questionnaire interview schedule and also from A.H Department .The net income generated by the beneficiaries of Mini dairy scheme stood at Rs. 1,41,939 per annum, Non-beneficiaries received an amount of Rs.30,776. Mini dairy provided family labour with an employment of 137 man days against 119 man days in respect of non-beneficiaries. This study indicates that rearing Murrah Buffaloes helps the rural farmers in income generation and employment.

Key words : Mini dairy , Nutritional security, Murrah Buffaloes, Calorie intake, Dairy farm

Introduction :

Under the agricultural domain, animal husbandry has occupied a prominent place by generating income, employment, nutritional security to the resource poor rural households. Livestock is an important component of small farmers' livelihood to meet their needs of milk, food security and daily cash incomes. It is a good source of employment generation, a tool for poverty alleviation and help in socioeconomic uplift in the country. Rural poverty is largely concentrated among the landless and the marginal households comprising about 70 percent of rural population (Kozel and Parker 2003; Taneja and BIRTHAL 2004). Several empirical studies indicate that livestock rearing has significant positive impact on equity in terms of income and employment and poverty reduction in rural areas (Thornton *et al.*, 2002; BIRTHAL and Ali 2005) as distribution of livestock is more egalitarian compared to land (Taneja and BIRTHAL 2004). Y.S.R. Kadapa district of Andhra Pradesh comes under scarce rainfall zone where most of the livestock farmers thrive on A.H. activities. Dairy farming offers multiple opportunities in upliftment of rural livestock farmers through sustainable income and employment generation. In this context to alleviate poverty in the rural areas, Government of Andhra Pradesh have implemented poverty alleviation programme in chronic drought prone district Y.S.R. Kadapa.

Material and Methods

The present study was undertaken at Kadapa District, a total of 100 farmers were selected 50 members beneficiaries, 50 members non beneficiaries, beneficiaries were given the 2 Murrah buffaloes. Returns, Income and employment generation details were obtained using structured questionnaire interview schedule of farmers and some information obtained from the A.H. Department.

Results and Discussion

Nutritional security of Mini dairy scheme sample respondents is presented in Table 24. The consumption of pattern of food items was relatively encouraging for beneficiaries compared to non-beneficiaries. Cereals consumption by the beneficiaries stood at 196 kg / annum against 122 kg / annum by the non-beneficiaries. Pulses were consumed to an extent of 14 kg by beneficiaries while it was only 7.0 kg by non-beneficiaries. Even oil was consumed to an extent 6 kg / annum by beneficiaries and only 3.0 kg by non-beneficiaries. Milk consumption to an extent of 62.0 kg by the beneficiaries, while only 44.0 kg for non-beneficiaries. Meat was again consumed in higher amounts by beneficiaries compared to non-beneficiaries. The no of eggs consumed were 95.0 for beneficiaries and 72.0 for non-beneficiaries. The consumption of fish, vegetables, fruits as well have higher for beneficiaries compared to non-beneficiaries.

The total calorie intake of the beneficiaries per day was 2506 k.cal while that of non-beneficiaries was 1816 k.cal. The caloric intake of beneficiaries has met the recommendations made by the ICMR that is 2400 k.cal/day while in respect of non-beneficiaries it was shorter by 584 k.cal. The amount spend for the calorie obtained for various food items was Rs.12,625 by the beneficiaries and Rs.8,138 by the non-beneficiaries. Relatively, beneficiaries had spent higher amounts on all the items compared to non-beneficiaries but however in terms of percentage of expenditure it was more or less similar for beneficiaries and non-beneficiaries.



Table 1 : Nutritional security of sample respondents of Mini dairy scheme

S.No	Name of the scheme	Nutritional security (kg/year)			Calorie intake (k.cal/day)			Nutritional security (Rs /year)	
		beneficiaries	non beneficiaries	beneficiaries	%	non beneficiaries	%	beneficiaries	non beneficiaries
1.	Mini dairy								
	a. Cereals	196.0	122.0	699.0	27.89	476.0	26.21	4600.0	3080.0
	b. Pulses	14.0	7.0	280.0	11.17	239.0	13.16	840.0	420.0
	c. Oil	6.0	3.0	180.0	7.18	146.0	8.03	480.0	240.0
Livestock products									
	d. Milk	62.0	44.0	504.0	20.11	359.0	19.76	2480.0	1760.0
	e. Meat	11.0	6.9	218.0	8.69	119.0	6.55	2200.0	1380.0
	f. Eggs (No)	95.0	72.0	120.0	4.78	109.0	6.00	380.0	288.0
	g. Fish	1.46	0.60	190.0	7.58	102.0	5.61	150.0	90.0

	h. Vegetables	37.0	22.0	215.0	8.57	179.0	9.85	1110.0	660.0
	i. Fruits	7.0	4.0	100.0	3.99	87.0	4.79	385.0	220.0
	Total			2506.0	100.0	1816.0	100.0	12625.0	8138.0



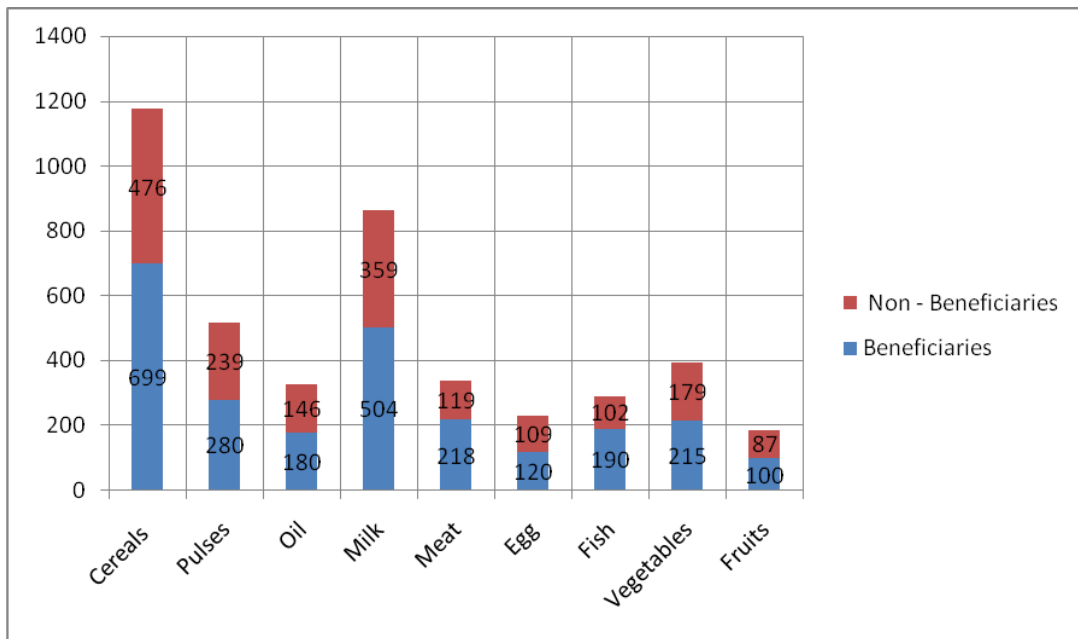


Fig. 1: Calorie (K.cal /day) intake of sample respondents of Mini Dairy scheme

Conclusion

Nutritional security of Mini dairy scheme beneficiaries received more in respect of quantity as well as in calories i.e 2506 k.cal followed by 2301 k cal, 2021 k cal. Due to implementation of Mini dairy scheme in rural farmers increased the nutritional security and calorie intake in beneficiaries than non beneficiaries. Government needs to implement such type of schemes to improve the nutritional and calorie intake of farmers.

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