



# Income generation and Nutritional security through Sunandini scheme 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 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 Sunandini scheme in drought prone area like Y.S.R. Kadapa district. In this Sunandini calf rearing scheme Government provides inputs like calf feed, healthcare and insurance coverage to crossbred female calves enrolled 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 Sunandini scheme stood at Rs. 54858 per annum, Non-beneficiaries received an amount of Rs. 38724. The total calorie intake of the beneficiaries was 2002 k.cal while that of non-beneficiaries it was 1736 k.cal. Sunandini scheme provided family labour with an employment of 86 man days against 72 man days in respect of non-beneficiaries. This study indicates that Sunandini scheme helps the rural farmers in income generation nutritional security and employment.

**Key words :** Sunandini , Nutritional security, calf rearing , Calorie intake

## 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, meat, 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. Calf rearing in 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 of 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 inputs like calf feed, healthcare and insurance coverage to crossbred female calves enrolled on subsidy and their nutritional security and calorie intake were calculated through information obtained by structured questionnaire interview schedule of farmers and some information obtained from the A.H. Department.

## Results and Discussion

For Sunandini calf rearing scheme, the total returns, net returns and gross margin were found to be Rs. 89,290, Rs 54,858 and Rs. 59,911 for beneficiaries and for non beneficiaries they were of the order of Rs. 74,075, Rs. 38724 and Rs. 44069, respectively as presented in Table 1. There is advantage of the scheme for the beneficiaries as they availed subsidy of the government to the extent of 20 % towards feeds. Similarly the veterinary expenditure accounting for 50 % of total amount incurred by the beneficiaries which was supported as subsidy by the Government. The present findings were in agreement with Mondal *et al.* (2010) who stated that yield increased with the increase of concentrate feed cost for both local and crossbred dairy cows

Nutritional security of Sunandini scheme sample respondents is presented in Table 2. The consumption of pattern of beneficiaries was relatively encouraging for beneficiaries compared to non-beneficiaries. . Cereals consumption by the beneficiaries stood at 137.0 kg / annum against 120.0 kg / annum by the non -beneficiaries. Pulses were consumed to an extent of 9.5 kg for beneficiaries only and it was 6.5 kg by non- beneficiaries. Oils were consumed to an extent 3.9 kg / annum by beneficiaries and 3.5 kg by non-beneficiaries. Milk consumption was to an extent of 46.0 kg by the beneficiaries, while only 42.0 kg for non-beneficiaries. Meat was again consumed in higher amounts by beneficiaries compared to non-beneficiaries. The no of eggs consumed were 76.0 for beneficiaries and 66.0 for

non-beneficiaries. The consumption of fish, vegetables and fruits was higher for beneficiaries compared to non-beneficiaries.

The total caloric intake of the beneficiaries was 2002 k.cal which was less by 400 k.cal / day while that of non-beneficiaries it was 1736 k.cal. Which the amount spend for the calories obtained from various food items was Rs. 9,129 by the beneficiaries and Rs 7,653 by the non-beneficiaries. Relatively, beneficiaries had spent higher amounts on all the items compared to non-beneficiaries. The calorie intake of beneficiaries and non- beneficiaries was less than the ICMR recommendation.

Calorie (K.cal/day) intake of sample respondents of Sunandini

scheme is depicted in Fig 1.

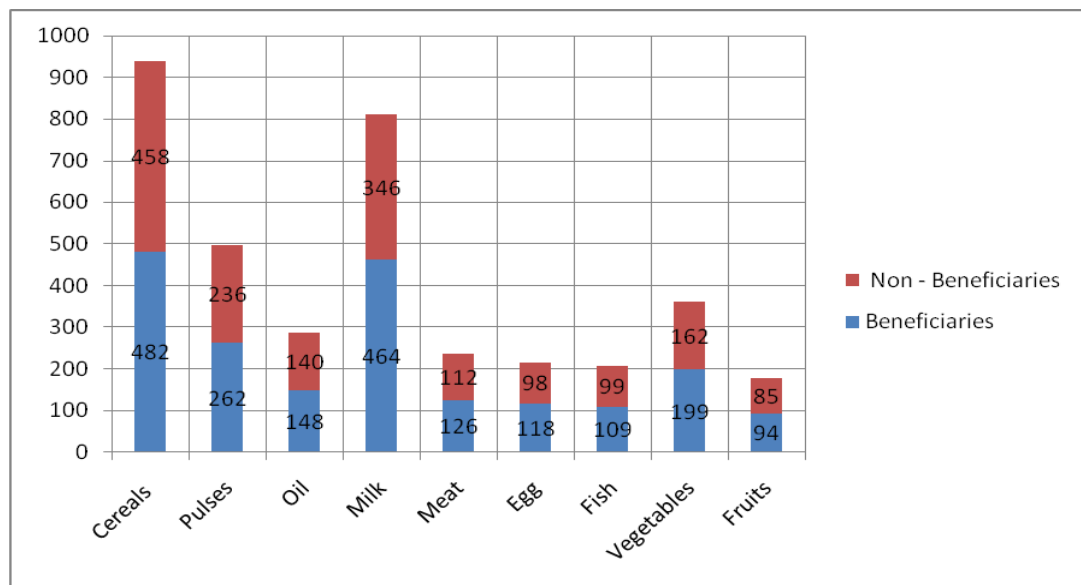
For both beneficiaries and non-beneficiaries the family labour employment (Table 3 )generated was estimated and cropping activity provided the beneficiaries with an employment of 95 man days and 71 man days for non-beneficiaries. Livestock i.e. Sunandini provided family labour with an employment of 68 man days against 50 man days in respect of non- beneficiaries. 70days of employment was found by the beneficiaries from working as agricultural laboures while 60 days of employment was found by the non-beneficiaries under this category of employment. Non-farm occupation too provided employment for about 86 days in respect of beneficiaries and 72 days for the non-beneficiaries. Virtually beneficiaries could able to find relatively more no of days of employment from various sources compared to non- beneficiaries.

Table 1: Returns from Sunandini scheme (Rs)

S.No	Particulars	Beneficiaries		Non –beneficiaries	
		Per unit	%	Per unit	%
1	Appreciation on the value of animal	4550	5.10	4600	6.21
2	Returns from sale of milk	76000	85.12	62280	84.08
3	Returns from sale of farm yard manure	2850	3.19	2110	2.85
4	Calf value	5890	6.59	5085	6.86
5	Total returns	89290	100	74075	100
6	Net returns	54858		38724	
7	Gross margin	59911		44069	
8	Returns per rupee of expenditure	2.6		2.0	

**Table 2 : Nutritional security of sample respondents of Sunandini 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.	Ksheera sager								
	a. Cereals	137.0	120.0	482.0	24.07	458.0	26.38	3230.0	2980.0
	b. Pulses	9.5	6.5	262.0	13.08	236.0	13.59	570.0	390.0
	c. Oil	3.9	3.5	148.0	7.39	140.0	8.06	280.0	272.0
	d. Milk	46.0	42.0	464.0	23.17	346.0	19.93	1840.0	1680.0
	e. Meat	9.0	6.5	126.0	6.29	112.0	6.45	1800.0	1300.0
	f. Eggs (No )	76.0	66.0	118.0	5.89	98.0	5.64	304.0	264.0
	g. Fish	0.67	0.54	109.0	5.44	99.0	5.70	100.0	81.0
	h. Vegetables	26.0	17.0	199.0	9.94	162.0	9.33	780.0	510.0
	i. Fruits	4.1	3.2	94.0	4.69	85.0	4.89	225.0	176.0
	Total			2002.0	100.0	1736.0	100.0	9129.0	7653.0



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

**Table 3: Family labour employment for different occupations of farmers of Sunandini scheme in man days per annum**

S.No	Particulars	Sunandini scheme	
		Beneficiaries	non -beneficiaries
1.	Cropping		
	a.male	30.0	28.0
	b.female	50.0	33.0
	Total	80.0	61.0
2	Livestock farming		
	a.male	29.0	21.0
	b.female	39.0	29.0
	Total	68.0	50.0
3	Agricultural labour		
	a.male	39.0	21.0
	b.female	31.0	39.0
	Total	70.0	60.0
4	Non – farm occupation		
	a.male	67.0	40.0
	b.female	19.0	32.0
	Total	86.0	72.0



## Conclusion

Sunandini scheme provides sustainable income, employment generation and family labour employment . Due to implementation of Sunandini 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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