



Income distribution and food security for economic sustainability of smallholder livestock farmers through the Mini Dairy unit at Y.S.R. Kadapa district (A.P)

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Abstract

Livestock production plays a vital role in the economic development and life of farmers in developing countries like India. The livestock sector has witnessed a phenomenal growth especially in the last decade owing to increased demand for food of animal origin. In India majority of rural households belong to small and marginal farmers in terms of land and animal holding. Thus , in rural India livestock development activity must be under taken for focusing on small and marginal land holders to alleviate the poverty. Government of A.P. implemented Mini Dairy scheme to bring economic sustainability by providing income and employment source.in rural smallholder livestock farmers they supplied two Murrah buffaloes on 75% subsidy with inputs services like feed and health care. As a result there is increased income in beneficiaries when compared to non- beneficiaries as 76% of Mini dairy scheme beneficiaries earned 52.02 % of income while the remaining 24% earned 42.98% of income while 74% of non- beneficiaries earned 46.12% of the income while the remaining 26% earned 46.12%.

INTRODUCTION

Smallholder livestock farmers are poor and food insecure mainly depends on cattle and sheep for their livelihoods. Due to lack of scientific knowledge, infrastructure facilities, credit source, extreme climatic conditions they are unable to sustain economically.. Barrett *et al.* (2001) reported off-farm income as all activities away from the farmer's own property and explained why not all households have the same opportunities to participate in

non-agricultural activities. Over the last two decades, livestock sector has grown at an annual rate of 5.6 per cent which is higher than the growth of agricultural sector (3.3 per cent). Randolph *et al.* (2007) made a survey and found that one argument is that over consumption of livestock leads to health concerns. Again, this argument also hinges on the “western” context where animal products are consumed at such high levels that they become a health concern. Many people in poor, developing countries have the opposite problem of not having enough regular access to such macronutrients as fat and protein. In this case, a glass of milk and a few eggs can go a long way toward meeting daily nutrition requirements.

This suggests that livestock is likely to emerge as an engine of agricultural growth in the coming decades. It is also considered as one of the potential sector for export earnings. To alleviate poverty in the rural areas, Government of India and Government of Andhra Pradesh have implemented various poverty alleviation programmes covering many Animal husbandry programmes in the state especially chronic drought prone districts like Y.S.R. Kadapa, forming part of Rayalaseema region. In order to assess the impact of the A.H. programmes on livelihood security the Government of Andhra Pradesh implemented Mini Dairy unit scheme to overcome the constraints faced by smallholder livestock farmers.

Key words : economic security, income generation, economic sustainability

Materials and Methods

In this study 50 beneficiaries, 50 non-beneficiaries under Mini Dairy unit scheme were selected randomly throughout the Y.S.R. Kadapa district, a chronic drought prone district in Rayalaseema region known for its backwardness in the country, the data pertaining to employment and income generation through Mini Dairy unit were collected from beneficiaries through a structured interview schedule. Government have implemented this Mini dairy unit scheme by supplying two Murrah buffaloes on 75 % subsidy, with inputs like feed, healthcare and insurance coverage to the enrolled animals.

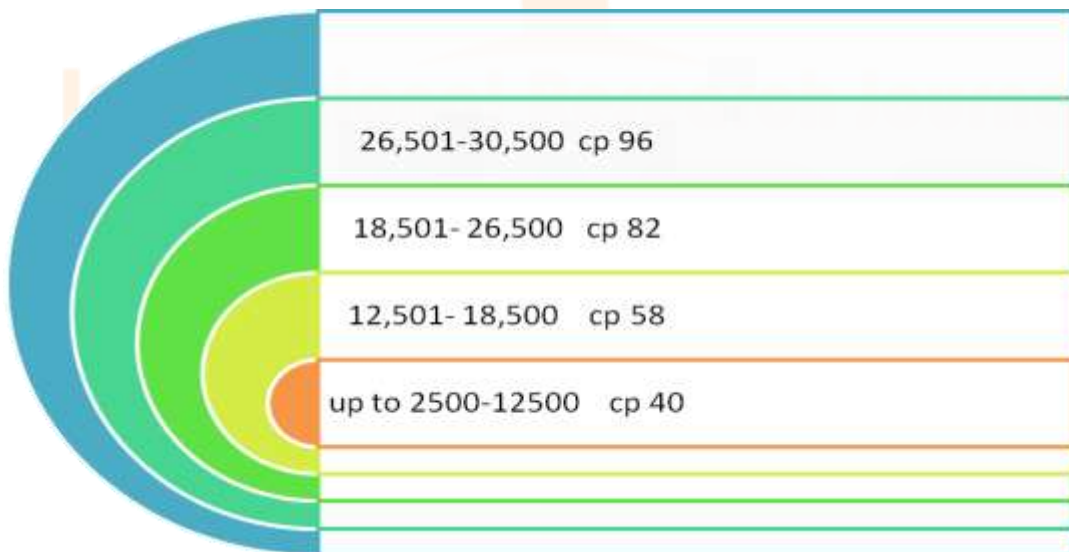
Results and Discussion

Income distribution pattern for the beneficiaries of the Mini Dairy unit scheme .The percentage of beneficiaries in the 16 income ranges presented more or less an identical situation in terms of percentage of beneficiaries but when looked into the income earned by the beneficiaries it showed that 76 % of beneficiaries earned 57.02 % of income while the remaining 24 % earned 42.98 % of income. (Table 1)

Distribution of households according to disposable income of Mini dairy scheme beneficiaries is depicted in Fig. 1.

Table 1: Distribution of households according to disposable income of Mini dairy scheme beneficiaries

S. No	Income (Rs)	% of respondents	Cumulative %	Average income per household (Rs)	% of average income	Cumulative % of income
1	upto 2500	6	6	2325	0.88	0.88
2	2501-4500	6	12	4049	1.53	2.42
3	4501-6500	8	20	5509	2.09	4.51
4	6501-8500	6	26	7735	2.93	7.45
5	8501-10500	8	34	9461	3.59	11.04
6	10501-12500	6	40	11941	4.53	15.58
7	12501-14500	6	46	12963	4.92	20.50
8	14501-16500	4	50	15116	5.74	26.24
9	16501-18500	8	58	17507	6.65	32.89
10	18501-20500	6	64	19206	7.29	40.19
11	20501-22500	4	68	21215	8.05	48.25
12	22501-24500	8	76	23085	8.76	57.02
13	24501-26500	6	82	25466	9.67	66.69
14	26501-28500	6	88	27640	10.49	77.19
15	28501-30500	8	96	28959	11.0	88.19
16	30501-32500	4	100	31083	11.9	100.0
		100		263260	100.0	

**Fig 1. Distribution of households according to disposable income of Mini dairy scheme beneficiaries****Cp : Cumulative percentage**

The income distribution pattern of non - beneficiaries revealed that 74 % the non-beneficiaries have fallen in the income range up to Rs 12,500 only 26 % of the farmers was in the income range of 12,501- 18,500. The share of 74 % of the farmers was to an extent of 46.12 % in the incomes earned. About 53.88 % of income

was earned by 26 % of the farmers. (Table 2).

Distribution of households according to disposable income of Mini dairy scheme non-beneficiaries are depicted in Fig. 2

Table 2: Distribution of households of non-beneficiaries of Mini dairy scheme according to disposable income

S. No	Income (Rs)	% of respondents	Cumulative %	Average income per household (Rs)	% of average income	Cumulative % of income
1	Upto 2500	12	12	2143	2.48	2.48
2	2501-4500	14	26	3667	4.25	6.73
3	4501-6500	14	40	5617	6.51	13.24
4	6501-8500	12	52	7601	8.81	22.08
5	8501-10500	12	64	9297	10.77	32.85
6	10501-12500	10	74	11448	13.27	46.12
7	12501-14500	8	82	13185	15.28	61.40
8	14501-16500	8	90	15445	17.90	79.40
9	16501-18500	10	100	17850	20.69	100.0
10		100		86253	100.0	

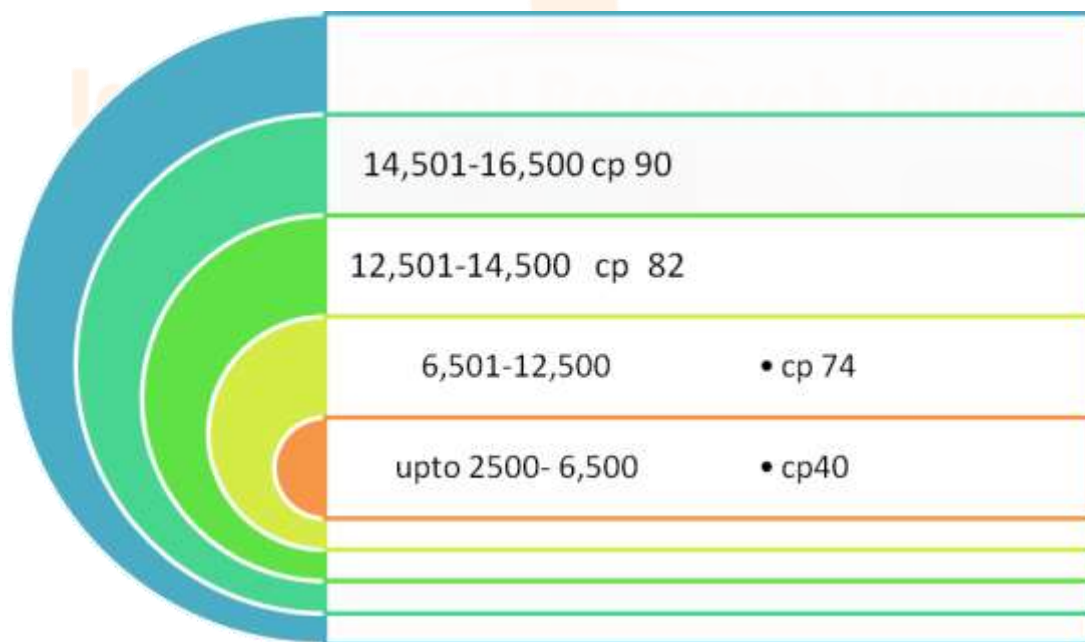


Fig. 2: Distribution of households according to disposable income of Mini dairy scheme non – beneficiaries

The distribution of disposable income between beneficiaries and non – beneficiaries (Table 1 and 2)

revealed that there were less number of farmers falling in the low income range in the case of beneficiaries while the corresponding number of farmers in the low income range were higher in respect of non-beneficiaries particularly the percentage of farmers falling in the income range above Rs.20,501 was about 36% while there was none in the case of non-beneficiaries which evidently shows that there was relatively better distribution of income among the beneficiaries. Atkinson and Bourguignon (2000) observed income distribution is a time taking process.

Conclusion

Income distribution pattern for the beneficiaries and non- beneficiaries of Mini dairy scheme when examined revealed that 76% of Mini dairy scheme beneficiaries earned 52.02 % of income while the remaining 24% earned 42.98% of income while 74% of non- beneficiaries earned 46.12% of the income while the remaining 26% earned 46.12%. This suggests that those beneficiaries who supported by Government with some training program on livestock management got better result compared to non- beneficiaries. Therefore Government needs to take more initiative schemes along with training programs to get sustainable income for smallholder livestock farmers.

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