International Journal of Science, Environment and Technology, Vol. 5, No 6, 2016, 4550 – 4554
ISSN 2278-3687 (O)
2277-663X (P)

STATUS OF MILK PRODUCTION IN SALEM DISTRICT OF TAMILNADU: A COMPARATIVE ANALYSIS OF MILK PRODUCERS OF DAIRY CO-OPERATIVE SOCIETY (DCS) VIS-A -VIS PRIVATE PLAYERS

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Abstract: A study on status of milk production by milk producers was purposively conducted in Salem district of Tamilnadu by following exploratory research design. A total of 150 milk producers (75 from DCS +75 from Private agency) were interviewed with the pre-tested interview schedule. The major finding is that mean milk production of Landless farmers is nearly equal to the mean milk production of milk producers possessing land (Small farmers). The study also revealed that milk production in Salem district is characterized by milk producers belonging to landless and small and medium sized farmers. Majority of the milk producers were small holders with the herd size of 4-7. The non-significant differences among the means of their milk production indicated that milk production is not related to the age and education level of the milk producers. The general impression of the study is that milch animal productivity of milk producers of DCS is comparatively higher than milk producers of Private agency.
Keywords: status of Milk production, DCS, Private players.

Introduction

In India, dairying is recognized as an instrument for poverty alleviation, social and economic development. The nation's milk supply comes from millions of small producers, dispersed throughout the length and breadth of rural areas.. India was a milk deficit country post-independence. Due to various policy interventions such as Operation Flood, Economic Policies of 1991(Liberalization, Privatization and Globalization) made India first in milk production, accounting for 18.5 per cent of world production, achieving an annual output of 146.3 million tones during 2014-15 as compared to 137.69 million tonnes during 2013-14 recording a growth of 6.26 per cent. Whereas, the Food and Agriculture Organization has reported a 3.1 per cent increase in world milk production from 765 million tones in 2013 to 789 million tones in 2014 (Economic Survey, 2015-16) . Sustainable Livelihoods Approach,

*Received Nov 23, 2016 * Published Dec 2, 2016 * www.ijset.net*

are genuinely transdisciplinary as they are produced, disseminated and are applied in the borderland between research, policy, and practice (Knuttson, 2006)

Methodology

Multistage stratified random sampling procedure was adopted to select the sample milk produ cers. This study was carried out in milk shed areas of Salem district of Tamilnadu which stands first in crossbred animal population and milk production. Five blocks were selected randomly from 20 blocks of Salem district. Five villages were selected randomly from the selected five blocks. Thirty farmers from one village (15 milk producers from DCS +15 milk pourers of Private agency) were selected. Thus a total of 150 respondents were selected randomly and were interviewed personally with the help of pre-tested semi-structured interview schedule. The collected data were tabulated, categorized and analysed statistically.

Results and Discussion

Data in table 1 depicts the mean milk production of the different aged people of DCS and private agency. The number of observations for different age categories varied drastically among DCS and Private agency. A glance at t-value in Table-1 reveals non-significant differences among the mean household milk production of young and old age. Even though there is no appreciable change in mean milk production of different age group of milk producers of DCS and Private there is significant difference among the middle aged milk producers of Salem district at $P < 0.05$ level of probability.

Table 1: Status of Milk production as related to age of Milk producers

S.No	Category	DCS			Private agency			Mean difference	t-value
		n	Mean	CV	n	Mean	CV		
1	Young (<34)	14	10.32	51.20	11	12.53	57.66	-2.21	0.866(NS)
2	Middle(34-59)	48	17.53	66.59	51	12.47	39.94	5.06	2.71*
3	Old(>59)	13	15.43	92.15	13	11.2	38.37	4.23	1.16(NS)

* Significant at 0.05 level of probability

It is observed from the Table 2 that milk contribution of landless milk producers of DCS are nearly twice than their counterparts in Private agencies. On the other hand the mean milk production of medium and large farmers of Private agency is comparatively less than their counterparts of DCS. The plausible reason might be that range of milk production of DCS and Private is 12-57.0 lpd (litres per day) and 6.0 to 24.0 lpd respectively. It's also evident from the t-value of the table 2 that the mean difference is significant at $P<0.05$. This can well be supported by the higher values of co-efficient of variation (CV) which ranged from a minimum of 36 to maximum of 75 per cent of DCS. A bird's eye view of the table 2 revealed

that the mean milk production of landless farmers (n=6) of private agency is half than that of the landless farmers of DCS (n=4). The reason might be that productivity of dairy animals of DCS is higher than the herds of Private agency milk producers.

Table 2: Status of Milk production as related to land holding of Milk producers

S.No	Category	DCS			Private agency			Mean difference	t-value
		n	Mean	CV	n	Mean	CV		
1	Landless	4	17.25	35.85	6	8.2	61.59	9.05	2.431*
2	Marginal	37	13.32	76.18	7	10.26	41.78	3.06	1.720*
3	Small	27	17.08	57.65	40	14.08	37.73	3	1.20NS
4	Medium and large	07	29.78	64.76	12	12.33	46.33	17.45	2.334*

* Significant at 0.05 level of probability

A glance at the table 3 shows that there is appreciable change in mean production of milk producers of DCS having different education level. On the other hand there is no appreciable change in the mean milk production of different education level of the milk producers of Private agency. *Students't-value* in Table-3 reveals non-significant differences among the values of mean milk production of herds owned by the milk producers of DCS and Private agency possessing various educational statuses. Much variation in the values was mainly due to varying number of milk producers in different categories and varied herd size. This can be well supported by the CV values of DCS (58.00-99.00 %) and Private agency (28.00-61.00%).

Table 3: Status of Milk production as related to education level of Milk producers

S.No	Category	DCS			Private agency			Mean difference	t-value
		n	Mean	CV	n	Mean	CV		
1	Illiterate	24	13.45	83.12	18	12.65	28.7	0.8	0.60
2	Primary	22	20.07	50.31	18	12.79	38.46	7.28	0.0469
3	Secondary	21	15.20	98.45	24	12.73	52.58	2.47	
4	Higher Secondary	4	10.77	98.65	11	10.85	52.12	-0.08	0.740
5	Gradation	4	18.5	49.98	4	8.63	61.78	9.87	1.950

Status of Milk production as related to herd size of Milk producers

It is observed from Table 4 that majority of the milk producers of both DCS and Private agency was 4-7 animals. It is important to mention here that the majority of milk producers of Salem district are smallholders. About one-fourth of the milk producers of DCS were owning more than seven cattle and mean milk production is 27.0 litres and the milk production ranges from 12 to 57 litres. Glance at the value of mean difference of different categories of herd

size reveals that no significant difference in mean milk production. The reason might be that increase in herd size increased in lactation performance. This finding is also contrary to the finding of Hymajyoti et al (2003) among the dairy farmers of East Godavari district of Andhra Pradesh.

Table 4: Status of Milk production as related to herd size of Milk producers

S.No	Category	DCS			Private agency			Mean difference	t-value
		n	Mean	CV	n	Mean	CV		
1	1-3	14	7.34	52.49	15	8.08	47.07	-0.74	0.449
2	4-7	40	12.94	45.17	56	13.06	40.00	-0.12	0.094
3	>7	21	27.4	55.69	4	17.75	18.61	9.65	2.59**

** significant at 0.01 level of probability

Status of Milk production as related to Primary occupation of the milk Producers

Data in Table 5 indicated that there is no significant change in milk producers' distribution pattern of both DCS and private based on their primary occupation. The data collected on this trend were subjected to *Student's 't'test* which revealed significant difference between DCS and Private agency milk producers having Agriculture as their Primary occupation at $P < 0.05$ level. A glance at the figures of Table 5 shows that the majority of the milk producers of Salem district were following mixed farming system with agriculture as the main enterprise. This finding is in accordance to the findings of Singh and Andershanna (1990) in Gujarat.

Table 5: Status of Milk production as related to Primary occupation of the milk Producers

S.No	Category	DCS			Private agency			Mean difference	t-value
		n	Mean	CV	n	Mean	CV		
1	Agriculture	61	16.89	75.16	66	12.57	42.98	4.32	2.457**
2	Agriculture labourer	8	12.56	33.80	3	7.33	57.98	5.23	1.870(NS)
3	Livestock rearing	4	10.75	82.22	4	10.00	-	0.75	0.12(NS)
4	Others	2	14	43.30	2	12.93	52.19	1.07	2.01(NS)

** Significant at 0.01 level of probability

Conclusion

From the overall study it can be concluded that milk production in Salem district is characterized by milk producers belonging to landless and small and medium sized farmers The study further revealed that milch animal productivity of the milk producers of DCS is comparatively higher than milk producers of Private agency. This study recommends that the Milk Procurement agencies (Co-operatives and Private agency) should play an impeccable

role to promote the landless people and small holders' livelihood through profitable and sustainable dairying.

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