IMPACT OF SCHEMES AND SUBSIDIES ON SMALL SCALE DAIRY ENTERPRISES OF NORTH MALABAR REGION OF KERALA STATE - AN ANALYTICAL SURVEY

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ABSTRACT

The present study was an attempt to find the influence of various schemes and subsidies implemented by government departments and other agencies on small holders' livestock production system. The study was carried out using a structured questionnaire and personal interview. The result obtained from this study apparently shows that majority of respondents have received calf feed subsidy scheme. However, 43.7 percent of respondents have not received any subsidy during the last five years. The Z-test between subsidy received and number of dairy animals is 0.103 with a corresponding *p* value of 0.021 based on 501 participants. This finding reveals that 264 beneficiaries out of 501 respondents have received the benefits of subsidy/ schemes only once and 18 dairy farmers have received the benefits in between 2 to 5 times. 219 respondents received no subsidy or benefits during the last five years.

Keywords: Schemes, subsides, small dairy enterprises, dairy farmers.

INTRODUCTION

Animal health in Kerala has increased manifold and the animal husbandry, animal management and dairy enterprises have progressively transformed from traditional smallholding to scientific dairying which includes scientific management, animal breeding, rational feeding of animals, disease diagnosis, it's prevention and control. The demand for milk and milk products has significantly increased due to increase in consumption (Devendra, 2007). The animal husbandry practice was becoming primary occupation among many rural segments of our state which previously was secondary to agriculture. This was generally because of the quick returns and less dependency on rain and on unpredictable climatic condition. (Ahuja, 1998).

However all these changes were not possible without new challenges and hardships in the State like Kerala, where the dairy enterprise is usually undertaken by marginal and unorganized farmers in small scale which is supplementary to their agriculture practice. Hence the government intervention in the form of subsidized feed, insurance coverage and incentive for milk production has a pivotal role in supporting dairy farmers to sustain. Involvement of women in dairy enterprise in Kerala is very significant, as it brings income in

the form of sales of milk and manure as organic fertilizers. It also provides self-employment and women empowerment. Research on similar smallholder dairy farms in Kilifi district, Kenya has reported off-farm income contributing to an average of 71 per cent of total household income (Mukhebi *et al.*, 1992). Sometimes, these small holder dairy farmers are supported by their family members as unpaid employees (Ahonan *et al.*, 1990).

MATERIALS AND METHODS

The current study was done by using personal interviews supplemented with pre-tested structured questionnaire having a reliability score of 0.895 with Cronbach's alpha in SPSS. This study was an attempt to gain insight knowledge regarding the impact of various schemes and subsidies provided by the different agencies to the dairy farmers of north Malabar region. A detailed questionnaire with personal interview was used as tool to gather information from 501 farmers randomly selected from four districts viz., Kasaragod, Kannur, Kozhikode and Wayanad comprising the North Malabar region of Kerala. Z-test, cross tabs and central tendencies as statistical tool were employed to determine the strength and relationship between the variables. This study was undertaken to determine the causal relationship and hypotheses testing between variables by the application of statistical techniques and also by using Z-test (Bajpai, 2015; Perkio-Makela and Hentila, 2005).

RESULTS AND DISCUSSION

Hypothesis 1

H_0: There is no statistically significant difference in the capital invested in dairy enterprise and among those received subsidy/benefits and those not received.

H_i: There is statistically significant difference in the capital invested in dairy enterprise and among those received subsidy/benefits and those not received.

Table 1. Comparisons of capital invested among the two groups

Group	Mean±SE	Z Value	P Value
Subsidy received	4.11±3.44	0.103	0.021
Subsidy not received	3.98±2.34		

*Significance at 0.05 level

One sample Z-Test between subsidy received and number of dairy animals is 0.103 with a corresponding *p* value of 0.021 based with the critical Z-score being 1.96 on 501 participants. Since the Z-value of 0.103 which is in between -1.96 and +1.96 the null hypothesis is not rejected and it is concluded that there is positive relationship between the two variables. There is no significant difference in the capital invested in dairy enterprise between those received subsidy/benefits and those not received.

Table 2. Cross tab analysis with frequency between age group and schemes for which the subsidy is received

		Type of benefit/subsidy received				Total
		Calf feed subsidy scheme	Cattle feed	Cattle shed	Nil	
Age	20-30	0	0	0	6	6
	31-40	1	0	0	35	36
	41-50	19	2	0	45	66
	51-60	124	1	0	94	219
	Above 60	124	0	11	39	174
Total		268	3	11	219	501

Source: primary data

Table 3. Frequency of subsidy received with regards to different schemes

Type of benefit/ subsidy	Frequency	Percentage
Calf feed subsidy scheme	268	53.5
Cattle feed	3	0.6
Cattle shed	11	2.2
Nil	219	43.7
Total	501	100.0

Source: primary data

The result obtained from this study illustrated in table 3 apparently shows that majority of respondents have received subsidy for calf feed subsidy scheme, a flag ship programme under Department of Animal husbandry, Government of Kerala. However 43.7 percent of respondents have not received any subsidy during last five years. Only 3 and 11 respondents have received benefits under cattle feed and cattle shed schemes, respectively.

Table 4. Frequency of subsidy received by the dairy farmers based on number of times received the benefit/subsidy

No. of times received the benefit/subsidy	Frequency	Percentage
Once	264	52.7
2 to 5 times	18	3.6
Nil	219	43.7
Total	501	100.0

Source: primary data

The results of this study (table 4) shows that 264 beneficiaries have received the benefits only once and 18 dairy farmers have received the benefits between 2 to 5 times with 219 respondents having received no subsidy or benefits during the last five years.

SUMMARY

The study shows that majority of respondents have received calf feed subsidy scheme. The evidence from this study also indicates that the Z-test between subsidy received and number of dairy animals is 0.103 and it is concluded that there is positive relationship between the two variables however with a weak strength of 0.103. This finding reveals that 264 beneficiaries out of 501 respondents have received the benefits of subsidy/ schemes only once and 18 dairy farmers have received the benefits in between 2 to 5 times. 219 respondents received no subsidy or benefits during the last five years. Altogether these results suggest that schemes and subsidies are essential in small scale diary enterprises of north Malabar region and should percolate down to be inclusive. The observations of this study were similar to the findings of Barooah and Goswami (1995).

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