RELATIONSHIP BETWEEN LEVEL OF EDUCATION AND MONTHLY INCOME OF DAIRY FARMERS OF NORTH MALABAR REGION OF KERALA STATE

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ABSTRACT

The present study was an attempt to describe the small holder livestock production system with the application of predictive modeling using regression analysis to gain understanding regarding the relationship between the level of education of dairy farmers and their monthly income. A regression analysis was conducted with monthly family income as the criterion variable and level of education as the predictor. It was found that level of education was a significant predictor of monthly family income of dairy farmers of North Malabar region of Kerala state.

INTRODUCTION

The small holder dairy farmers having one or two milch cows are the back-bone of the Indian diary industry. Although the average milk production per cow is ranging from 3 to 7 litre per day, India is the highest milk producing country in the world. In India, dairy sector is an integral part of agriculture (Devendra, 2007). The present study was planned to identify the significance and strength of relation between level of education and monthly income of dairy farmers, which essentially influences the dairy farm productivity and profitability.

MATERIALS AND METHODS

The study was conducted from May, 2014 to June, 2016 with a pre-tested structured questionnaire having a reliability score of 0.890 with Cronbach's Alpha. The questionnaire was designed to gain insight regarding the farm management practices adopted by dairy farmers in the North Malabar Region consisting of Kasaragod, Kannur, Kozhikode and Wayanad.

The study was conducted among randomly selected 501 dairy farmers to determine the relationship between level of education of dairy farmers and their monthly income.

The data were analysed statistically by using regression analysis with monthly family income as the criterion variable and level of education as the predictor.

RESULTS AND DISCUSSION

Table 1. Model summary of regression analysis used in the study

| Model | R | R Square | Adjusted R Square | Std. Error | Change Statistics | | |
|-------|-------|----------|----------------------|------------|-------------------|-------------------|-----|
| | | | | of the | R Square | R Square F Change | |
| | | | | Estimate | Change | 1 Change | df1 |
| 1 | .524ª | .274 | .273 | .76153 | .274 | 188.733 | 1 |

Dependent variable: Monthly family income

Predictors (constant): Level of education

 Table 2. Regression Coefficients

| | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--------------------|-----------------------------|---------------|---------------------------|--------|------|
| Model | | В | Std. Error | Beta | | |
| | (Constant) | 2.768 | .095 | | 29.219 | .000 |
| 1 | Level of education | .524 | .038 | .524 | 13.738 | .000 |

a. Dependent variable: Monthly family income

Table 3. Predictive modelling

| Constant | Slope/regression co- efficient | Independent variable | Dependent variable | |
|----------|-----------------------------------|----------------------|--------------------|--|
| a | В | С | у | |
| 2.768 | 0.524 | 1 | 3.292 | |
| 2.768 | 0.524 | 2 | 3.816 | |
| 2.768 | 0.524 | 3 | 4.34 | |
| 2.768 | 0.524 | 4 | 4.864 | |
| 2.768 | 0.524 | 5 | 5.388 | |

y Dependent variable = Monthly family income

b Slope

c Independent variable = Level of education

a Constant

Level of education was a significant predictor of monthly family income and accounted for 27% (R²=27.4) of the variance in the monthly family income scores. Wagas et al. (2015) revealed positive relationship between education and effective utilization of information source for the betterment of income from livestock farming. Similarly, Arora et al. (2006), Rajput (2007) and Devi (2013) found significant positive association between education and knowledge for the adoption of improved dairy husbandry practices. Contrary to this, Type et al (1993), Gunlu et al (2003), Gangasagare and Karanjkar (2009) reported that there is no relation between level of education and milk production.

SUMMARY

A regression analysis was conducted with monthly family income as the criterion variable and level of education as the predictor. Level of education was found to be a significant predictor of monthly family income.

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