

exchange complex to the soil solution, which accumulate in greater amounts in the leachate, and get lost.

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FARMERS DEALER LOYALTY FOR PESTICIDES IN COIMBATORE DISTRICT

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ABSTRACT

A study was conducted in Coimbatore district with 120 farmers to analyse the dealer loyalty of farmers towards pesticides purchase through a linear multiple regression. The results revealed that the credit availability and quality products were significant at one per cent level, malpractices significant at one per cent but negatively, price and availability of preferred brand were significant at five per cent level. The study also showed that farmers are loyal to the dealers.

KEY WORDS : Dealer, regression, significance, loyalty

There is an urgent need for increasing the agricultural production to keep pace with ever increasing population. It is necessary to ensure timely and increased availability of critical inputs like fertilizers, pesticides, machinery, hybrid seeds and improved package of practices to the farmers. The pesticides, in fact, play the crucial role of insuring the efficiency of all the associated inputs plus time, efforts and energy spent on the cultivation of various crops and also protect them from pests, diseases and weeds. The pesticide use pattern of cultivators was based on their expectations with regard to time and intensity of pest attack and the effectiveness of pesticides. Mohanan (1980) observed that choice of pesticides has been influenced by past experience and quality. Singh and Singh (1986) observed that the choice of dealer was based on the provision of incentives particularly in the form of subsidy. Co-operatives

and private dealers were the initial suppliers of pesticides. Agricultural department was approached by farmers because of provision of subsidy and technical guidance.

Coimbatore district is an important and agriculturally well developed district in Tamil Nadu. The farmers in this district are practising modern agricultural technologies for various crops. An attempt was made to study the farmers attitude towards dealers *i.e.*, their loyalty towards dealers in respect of purchase of pesticides.

MATERIALS AND METHODS

The study was conducted purposively in Coimbatore district during 1993. In this district, three blocks *viz.*, Anaimalai, Udumalpet and Pollachi (South) were selected randomly. In each of these blocks, four villages were again selected

randomly. Then from each village, ten farmers were selected at random. Thus 120 sample farmers formed the total sample size. A linear multiple regression model of the following form was specified to estimate the factors influencing the dealer loyalty among the farmers.

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + u$$

Where,

Y	- Dealer loyalty
b ₀	- Intercept
b ₁ to b ₈	- Regression coefficients
x ₁	- Credit availability
x ₂	- Quality of the product
x ₃	- Availability of preferred brand
x ₄	- Price of the product
x ₅	- Customer service
x ₆	- Malpractices
x ₇	- Peer group influence
x ₈	- Dealer's advertisements
u	- Error term
D ₁	= 1, if credit purchase was made
D ₁	= 0, otherwise

The explanatory variables x₂ to x₃ were measured using a four point continuous scale based on satisfactory levels

<i>i.e.</i>	4 - Highly satisfactory
	3 - Satisfactory
	2 - Moderately satisfactory
	1 - Not at all satisfactory

RESULTS AND DISCUSSION

The results of the linear multiple regression analysis for estimating the factors influencing dealer loyalty are presented in Table 1. The co-efficient of multiple determination was 0.62, indicating that the explanatory variables included in

Table 1. Estimates on dealer loyalty

Variables	Estimated Coefficient	Standard error	t' value	Significance
Intercept	-0.504	0.781	-0.646	
Credit availability (x ₁)	0.005	0.001	4.742	**
Quality of the product (x ₂)	0.359	0.110	3.259	**
Availability of preferred brand (x ₃)	0.295	0.147	1.996	*
Price of the product (x ₄)	0.327	0.129	2.528	*
Customer service (x ₅)	0.087	0.137	0.631	NS
Malpractices (x ₆)	-0.315	0.096	-3.265	**
Peer group influence (x ₇)	0.070	0.106	0.662	NS
Dealers advertisements (x ₈)	0.128	0.133	0.964	NS

R² = 0.62 N = 80 F = 8.55

**, * - Significant at one and five per cent levels of probability respectively ; NS - Not Significant

the function explained 62 per cent of variation. Credit availability (x₁) and quality of the product (x₂) significantly influenced the dealer loyalty of the farmers at one per cent level. Availability of preferred brand (x₃) and price of the product (x₄) also influenced significantly at five per cent level. If credit facilities were given by the dealer and the quality of the products sold by him were good naturally the farmers would tend to be loyal to that dealer. The variable malpractices prevailing at the dealers point also significantly influenced the farmers dealer loyalty but with negative co-efficient *i.e.*, the farmers became disloyal, when they came to know that the dealers were doing some malpractices in the pesticide sales. Customer service (x₅) was not significant, indicating the need to provide better customer service as expected by the farmers. Similarly, peer group influence (x₇) and dealers advertisement (x₈) were not significant. The results of this study are in agreement with the findings of Sankari (1991) and Sivakumar (1987).

CONCLUSION

The study brought to light that the farmers relied more upon the private dealers since they are the primary source of information on various aspects of plant protection. More over, the credit facility made available to farmers at the dealers point of sale has attracted them and made them

loyal to such dealers. The dealers are playing a crucial role in recommending and supply of various plant protection chemicals and the dealers should be given training on plant protection at periodic intervals.

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DETAILED SOIL SURVEY AND EVALUATION FOR LAND USE INTERPRETATIVE GROUPING IN TAMIL NADU AGRICULTURAL UNIVERSITY FARM, COIMBATORE.

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ABSTRACT

Based on detailed soil survey of the Tamil Nadu Agricultural University main campus farm, six series namely Palathurai (Pth), Somayanur (Smy), Peelamedu (Plm), Perianaickanpalayam (Pyk), Panaimarathupatti (Pmt) and Chavadiparai (Cvp) series were identified and mapped by the detailed soil survey. According to USDA system of soil taxonomy, the soils were classified as : Pth and Smy - Typic Haplustalfs, Plm - Typic Pellusterts, Pyk - Typic Chromusterts, Pmt - Vertic Ustifluvents and Cvp - Typic Rhodustalfs. Under the different interpretative groupings viz., land capability classification, storic index rating, soil and land irrigability, productivity rating and potential productivity rating of the soils of the farm, Smy and Pyk series were adjudged to be the best productive soils. The co-efficient of improvement values revealed that there was high scope to enhance the productivity of all these soils through extra investment.

KEY WORDS : Detailed Soil survey, soil taxonomy, soil series, interpretative groupings, land capability, soil rating.

Adequate soil care is the prime concern to the productivity of soil which forms major part of the factors at production viz., land, labour, capital and organisation. The proper utilisation of soil depends on the awareness of the whole nature of soil. It is highly imperative to state that the study on soil resources, identification, classification etc. are highly useful to a scientist so as to enable one make use of the soil resources to the best advantage of boosting production of food in a country like India, where the population growth is threatening the economy of the nation in the recent decades. The Tamil Nadu Soil Survey and Landuse Organisation performed reconnaissance soil survey for mapping the series at phase level in Coimbatore district. The characterization, classification and interpretative groupings of the Tamil Nadu Agricultural

University farm soils are lacking. Therefore, the detailed investigation of the oldest agricultural institution in India was taken up.

MATERIALS AND METHODS

The study was under taken during 1993 to assess the potentiality of soils in Tamil Nadu Agricultural University main campus farm, Coimbatore including the wetland and Paddy Breeding Station farm which is situated 7 km away (west) from the Gandhipuram bus stand of Coimbatore. This farm is geographically situated at 11°N latitude and 77°E longitude with an altitude of 930.0 m above MSL. It experiences long and hot summer and a very brief cold and rainy winter with unpredictable monsoonic rain effect. The mean annual rainfall is 675 mm with about 45 per cent