CHAPTER VI

BRNAD LOYALTY FOR FERTILIZERS IN TIRUNELVELI DISTRICT
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BRAND LOYALTY FOR FERTILIZERS IN
TIRUNELVELI DISTRICT

6.1. Profile characteristics of the sample respondents (Farmers)

A separate questionnaire was administered to 50 farmers in the Tirunelveli district. The purpose of the questionnaire was to know the competency or otherwise of these farmers in dealing with the business.

6.1.1. Age

The average age, of the sample respondents of the Tirunelveli district, was found to be 48.6 years with a standard deviation of 12.5 years. The lesser average age in this district with a lesser standard deviation indicate that in the case of Tirunelveli district, people undertake farming operation at an early age. Might be because of the lower literacy level, they would have attended farming operations at an early age.

6.1.2. Education

The average education level of the respondents in the Tirunelveli district is 9.6 with a standard deviation of 4.2 units. This shows that the education level of the respondents in Tirunelveli district is poor. The average is lower and the variation is higher. This might be due to two
reasons: (i) In this district even today the villages are not connected well with good road facilities. In most of the villages people have to travel at least 2 to 3 kilometers for attending primary education, (ii) The average rainfall is also low and in most of the places the land also, being rock, not fit for cultivation and being one of the district with highest temperature level would have affected education due to inconsistent income.

6.1.3. Gender

In Tirunelveli district, there were 37 male respondents and 13 females, which shows that two third are men and one third are women.

6.1.4. Major Occupation

The total score for the major occupation of the respondents in Tirunelveli district is 40 which indicates that 80 percent of the respondents have farming as their major occupation.

6.1.5. Loan in Co-operative societies

In the case of the Tirunelveli district the total score for this variable is 42. This shows that only 84 percent of the respondents have availed co-operative bank loans in this district. The lesser percentage may be due to uncertainty of earnings for repayment. In this district, agriculture is a
gambling against nature. The rainfall will be only for a certain period and hence lesser probability for repayment.

6.1.6. Land Holding

In the case of Tirunelveli district, the average wet land possessed is 4.2 acres, gardern land is 1.9 acres, and the dry land is 12.8 acres. The district's total wet land is three fold; the gardern land is little less and dry land is available; when compared to those in Kanyakumari district. The higher level of the wet land in this district might be due to the fact that, in the Thambraparni area there is a long stretch of paddy fields and the farmers have to travel longer distance from their residential area. In the case of gardern land, underground water source is low due to hard rocks, and hence the lower average in this district.

6.1.7. Usage of Farm yard manure

In Tirunelveli district, farmyard manure is comparatively cheaper. Moreover every farm house have sufficient space to accommodate the animals. Hence all farmers use farmyard manure.

6.1.8. Use of Chemical fertilizer

In Tirunelveli district all the respondents are using Chemical fertilizers.
6.1.9. Preference to Chemical Fertilizer

Here, 32 percent have expressed, easy availability as the reason for the preference to chemical fertilization, 44 percent have expressed immediacy of return as the reason for preference and 24 percent have expressed easy transportation as the reason.

6.1.10. Reason for choosing branded fertilizer

In this district, 32 percent of the respondent have stated easy availability as the reason for choosing branded fertilizer, 20 percent have stated good quality as the reason, 8 percent have stated good packing as the reason and 40 percent have stated immediate effect on the soil as the reason.

6.1.11. Sources of brand information

In this district also, majority (42%) have identified the mass media as the major source of information. Second comes the neighbour’s (30%), third is the dealers (26%), and the other sources (2%).

6.1.12. Farmers Preference to Dealers

In the case of the Tirunelveli district also majority (28%) have considered the quality of the product as the reason for the choice of the
dealer. Second comes (26%) the price of the product, third is technical guidance (22%), fourth is the availability of credit (20%), and the last is the discount and subsidy (4%).

6.1.13. Farmer's loyalty towards brand

In this district, majority (32%) is for quality of the fertilizer, second comes the availability (24%), third is the good package (20%), fourth is the price (18%), fifth is the advertisement (4%) and the last is the peer group influence (2.9%).

6.2. Profile characteristics of the sample respondents (Dealers)

A separate questionnaire was administered to 50 dealers in Tirunelveli district. The purpose of the questionnaire was to know the competency or otherwise of these dealers in dealing with the business.

6.2.1. Education

The average education level of the dealers in this district is 10.9 with a standard deviation of 2.75 units. This shows that the average education level of the fertilizer dealers in this district is more than that of the average level of education of the farmer respondents. This might probably be due to the fact that in the Tirunelveli district, mostly, people
belonging to the affluent family alone come for business after the school education, which again might be due to the capability for the large investment in business.

6.2.2. Experience

The average number of years of experience for the fertilizer dealers in Tirunelveli district is 9.43 years with a standard deviation of 2.71 years. This shows that the dealers are having good experience in business.

6.2.3. Number of employers employed

The average comes to 2.3 with standard deviation of 1.3 units. Here also, the number of employees will be either 2 or 3 in each shop.

6.2.4. Brand of fertilizer stocked

The major brands stocked by the dealers in this district are: SPIC, FACT, VIJAY, PARRY, MFL, IPL and STANES.

6.2.5. Sales Turnover

The average sales per year in different brands are presented below in the Table 6.1.
Table 6.1. The average sales per year for different brands in Tirunelveli District

<table>
<thead>
<tr>
<th>Brand name</th>
<th>Average sales per year (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spic</td>
<td>247.5</td>
</tr>
<tr>
<td>Fact</td>
<td>87.5</td>
</tr>
<tr>
<td>Ipl</td>
<td>143.8</td>
</tr>
<tr>
<td>Mfl</td>
<td>32.3</td>
</tr>
<tr>
<td>Vijay</td>
<td>9.6</td>
</tr>
<tr>
<td>Parry</td>
<td>7.1</td>
</tr>
<tr>
<td>Stanes</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: Primary Data

6.3. Functional Analysis

In order to know the impact of the different factors responsible for the loyalty toward a particular brand, the brand loyalty score (Y) is regressed on price per bag (x₁), quality of the product (x₂), amount spent on advertisement (x₃), average number of contacts with peer group (x₄), and good package (x₅).

Here, for the variable - quality of the products (x₂) the per unit returns, as expressed by the respondents was used. The variable -package is used as a binary with value one if package is good and zero otherwise.
The functional form assumed is:
\[ Y = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 \]

The estimation of the parameters was based on the principle of least squares.

The mathematical form of the estimated equation for the respondents in Tirunelveli district is:

\[ Y = 12.751 + 0.568^* x_1 + 1.652^{**} x_2 + 0.015^{**} x_3 + 0.0561^{NS} x_4 + 0.851^{**} x_5, \]
\[ R^2 = 0.65^{**} \]

The details regarding the variables, the standard error of the parameters, level of significance are presented below in Table 5.2.
Table 6.2. Regression estimates and standard errors of the Co-efficients

<table>
<thead>
<tr>
<th>S. No</th>
<th>Variable Name</th>
<th>Regression Co-efficient</th>
<th>Standard error</th>
<th>‘T’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Intercept</td>
<td>12.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Price per bag (x₁)</td>
<td>0.568</td>
<td>0.256</td>
<td>2.215</td>
</tr>
<tr>
<td>3.</td>
<td>Quality of the product (x₂)</td>
<td>1.652</td>
<td>0.472</td>
<td>3.462</td>
</tr>
<tr>
<td>4.</td>
<td>Amount spent on advertisement</td>
<td>0.015</td>
<td>0.0075</td>
<td>1.995</td>
</tr>
<tr>
<td>5.</td>
<td>Contact with peer group (x₄)</td>
<td>0.0561</td>
<td>0.0653</td>
<td>0.859</td>
</tr>
<tr>
<td>6.</td>
<td>Package (x₅)</td>
<td>0.851</td>
<td>0.2068</td>
<td>4.115</td>
</tr>
</tbody>
</table>

N = 50 \quad R^2 = 0.65**

Source: Computed from Primary data with the help of Computer.

The results presented above reveals that R-Square is 0.65 which is significant at one percent level of probability indicating the fact that 65 percent of the variations in the Brand loyalty is being explained by the five variables included in the study. The regression Co-efficient for the
variable - contact with peer groups, alone is not significant. This indicates that the peer group contact has not influenced the farmers in any way towards the loyalty towards any particular Brand of the fertilizer.

The regression co-efficient for the variable - price per bag is 0.568 which is significant at five percent level of probability. The positive effect of this variable is an indication of the preference for quality good. Again, this is confirmed by, the highly positive and significant at one percent level of probability for the regression Co-efficient on the quality of the product. The positive and significant value of the regression Co-efficient for the variable - amount spent on advertisement, at five percent level of probability, is an indication of the positive effect of the advertisement on the Brand loyalty. Again, the regression Co-efficient for the variable – package, is positive and significant at one percent level of probability. This indicates that the respondents give higher priority for the good packing of fertilizer also. This might be due to the fact that the package is re-usable. On the whole, the functional analysis for Tirunelveli district reveals the positive influence of quality, advertisement and good package, on the Brand loyalty for fertilizers.