

Impact of Marketing Strategy on Market Share of Ornamental Horticultural Exports ; The Sri Lankan Case.

H. S. Rohitha Rosairo

Department of AgriBusiness Management, Sabaragamuwa University of Sri Lanka, PO Box 02, Belihuloya, Sri Lanka.

Abstract

This study examines the marketing strategy adopted by Sri Lankan exporters of Ornamental Horticultural Products. Sri Lanka; as a country, has a very small and shrinking market share in the expanding main world markets for these products. Product, promotion and marketing information are the facets of strategy under consideration. Research was carried out using a cross sectional survey. Primary data were gathered from personal interviews using a questionnaire. Representatives from a total of 40 private sector firms were interviewed. Hypotheses were tested using one tail hypothesis testing of the population mean. Statistical analysis was done using ANOVA, regression and correlation analysis. This study suggests that Sri Lanka has a poor strategy of Product, promotion and marketing information. Product, promotion and market information strategies individually and interactively showed positive correlation with sales revenue of export firms. It is concluded that, breadth of product assortment and reliability of delivery have been satisfactory while product innovation, manipulation of product assortment, frequency of advertising, personal selling, participation in trade fairs, marketing information from main markets, resource allocation in search of marketing information, activities with local organizations and marketing intelligence have been below expected levels. Above 11 strategic factors proved contributory towards market share.

Introduction

Developing countries have a strategic interest in improving their export trade. Export trade earns much valued foreign exchange that is needed to meet import expenditure of developing countries. Export trade requires aspects such as; superior technology, quality awareness, superior raw materials, infrastructure, support services including banking, airfreight, promotional activities etc. (Degamboda, 1992: 2-8). Developing countries usually show a higher share in national income by Agriculture while the industrialized countries show a relatively smaller share (Benjamin, Hariharan & Karunagaran, 1989: 7-8,62). Agricultural products have a healthy demand in the international market place. Therefore, these economies attempt to raise their output of agricultural products with a view to earn much needed foreign exchange. Ornamental Horticulture plays a prominent role in the world trade. People from all over the world purchase ornamental horticultural products that include plants, cuttings, cut flowers, flower buds, decorative cut foliage and underground parts of the plants to create pleasant indoor environments. The average household in the Netherlands represents a purchase of 20 pot plants per annum (SLEDB, 1993). The main importing countries of Ornamental Horticultural Products have been identified as; Belgium/Luxembourg, Denmark, France, Germany, Italy, The Netherlands, Spain, Switzerland, UK, USA and Japan (Pertwee, 1998: 28-48). These are identified as " The Main Markets ". Usually the world trade statistics of this sector and country rankings are analyzed in relation to these main world markets.

Table 1: World Horticultural Exports into Main Markets (US \$ Millions)

Category	1994	1995	1996
Cutflowers	2'884	3'364	3519
Foliage	426	498	536
Plants	1500	1708	1901
Total	4810	5570	5956

Source: *Pertwee J., International Floriculture Quarterly Report Vol. 6 No. 3.*

The total horticultural export trade is larger than above figures given in table 1, because the main world market represents only 12 countries. Sri Lanka has a very low market share in the main world markets for ornamental horticultural products (Table 2). To magnify the problem, Sri Lanka has failed to recognize this important trade by not allocating a place for it in the Agricultural Work Plan for 1993 – 1997 (SLEDB, 1993). Sri Lanka's market share in the main world market, during the three years considered has been 0.17%, 0.15% and 0.14%, respectively (Table 2). Sri Lanka's world ranks as an exporter of these products to the main world markets for the years 1994, 1995 & 1996 have been 31st, 31st and 33rd respectively (Pertwee, 1998: 28-48). Despite all the strengths & opportunities, it would appear that Sri Lanka's market share is diminishing in an expanding main world market.

This study focuses on the research problem "why does Sri Lanka have a very small and a diminishing market share in an expanding main world market for Ornamental Horticultural Products?" Sales revenue reflects the market share. Therefore, the central objective of this study is to find out the reasons that have resulted in low total sales revenue of organizations that export Ornamental Horticultural Products to main world markets

Table 2: Total Exports of Ornamental Horticultural Products Sri Lanka (US\$ Millions)

Year	Total Value	Percentage From Exports To Main World Markets
1993	5.9	---
1994	8.2	0.17
1995	8.5	0.15
1996	8.2	0.14
1997	8.4	---

Source: *External Trade Statistics, Sri Lanka Customs 1993 to 1997.*

The specific objectives of this study are as follows;

1. To study aspects of the product strategy adopted by Sri Lankan exporters with regard to export trade of ornamental horticultural products.
2. To study aspects of the promotion strategy adopted by Sri Lankan exporters with regard to export trade of ornamental horticultural products.
3. To study aspects of the market information available as strategy, for Sri Lankan exporters.
4. To propose a basic conceptual model to demonstrate as to how the strategies for product, promotion and market information lead Sri Lanka to gain a larger share of the main world market of Ornamental Horticultural Products.

Hypotheses of the study

Product, Promotion and Market Information thought to be the three key issues that have an importance in export marketing of ornamental horticultural products and Sri Lankan exporters do not seem to handle these aspects strategically. This gave rise to the following hypotheses of this research study.

H1: Sri Lanka has a poor strategy of product.

H2: Sri Lanka has a poor promotion strategy.

H3: Sri Lanka has a poor strategy for market information.

Method

The study was undertaken using a cross-sectional survey. Data have been collected through personal interviews using a questionnaire. Data were collected from 40 randomized firms. The sampling frame was a pool of 75 firms that were identified as exporters of Ornamental Horticultural Products from Sri Lanka. The sample represented small, medium and large-scale business entities.

Strategies for product, promotion and market information have been considered as the independent variables of this study. Each independent variable was quantified using key factors. Product Innovation, Breadth of Product Assortment, Manipulation of Product Assortment and Reliability of Delivery have been selected as key factors of product strategy. Frequency of Advertising, Participation in Trade Fairs and Frequency of Personal Selling have been selected as key factors of Promotion Strategy. Market Information from Main Markets, Resource Allocation in Search of Market Information, Activities with Local Organizations for Horticulture and Marketing Intelligence have been selected as key factors for strategy for Market Information. The three independent variables were suggested to have an effect on the total sales revenue of firms. Therefore, annual average sales revenue was selected as the dependent variable of this study.

The relationships between the dependent variable and each of the independent variable and the effect of combination of three independent variables acting on the dependent variable were tested. The Likert scale was used in the questionnaire to place each respondent at an appropriate point on the scale for each measure. One tail hypothesis testing of population mean was done to test the hypotheses and an Analysis of Variance (ANOVA) was done on main effects and interaction to analyze variances, at 5% level of significance.

It was assumed in this study that relationships between variables are linear. Regression and correlation was done to compute intercepts, regression coefficients, coefficients of determination and coefficients of correlation and these were used to fit a model of strategies and outcomes through dependent and independent variables.

Results and Discussion

There is a growing need for the development of international marketing skills to strengthen the competitiveness and to achieve growth in the export oriented industry in Sri Lanka. As a collective business entity, Sri Lanka's objectives of export oriented industry are increasing foreign exchange prospects, achievement

of long-term economic growth, maximization of total sales revenue and improving overall position in the world trade. An international marketing program has to be built on foundations with three important strategic elements; sound product, sound promotion, carefully gathered and analyzed market information. Most firms in the industry under study showed a lack of long-term orientation.

Sales Revenue and Product Strategy

The hypothesis testing statistically indicates that Sri Lanka has a poor strategy for product (F computed = -2.133, F table = 1.65 at 5%). The variance caused by different levels of strategy of product to result different sales revenue is significant. The standardized F statistic in ANOVA was 40.3699 (F table = 3.96 at 5%). Therefore, strategy of product has a positive effect on sales revenue. A simple linear regression of sales revenue (Y) on product strategy (X₁) yielded the following prediction line;

$$Y = 0.989 + 1.532 X_1$$

The regression of strategy of product, adequately and significantly explains sales revenue (F computed = 9.785, F table = 4.10 at 5%) and the relationship is significantly positive (coefficient of correlation = 0.452). Study suggests that strategists should concentrate on product innovation, breadth of product assortment, manipulation of product assortment and reliability of shipping as four aspects or drivers in making strategy of product. Therefore, these four drivers become four of many aspects that have the ability to make an impact on the long run direction and profitability of an export organization. It is inferred that Sri Lanka does not strategically handle above four drivers, hence a poor overall strategy of product.

Sales Revenue and Promotion Strategy

This study statistically indicates that Sri Lanka has a poor promotion strategy (F computed = - 8.498, F table = 1.65 at 5%). This study also prove that the promotion strategy has the ability to bring about changes in sales revenue. The standardized F statistic in ANOVA was 69.577 (F table = 3.96 at 5%). Therefore, promotion strategy has a positive effect on sales revenue. A simple linear regression resulted the following regression line of sales revenue (Y) on promotion strategy (X₂);

$$Y = 1.292 + 2X_2$$

The regression of promotion strategy significantly explains the sales revenue (F computed = 28.573, F table = 4.10 at 5%) and the relationship is strongly positive (coefficient of correlation = 0.655). The indicators; frequency of advertising, participation in trade fairs and frequency of personal selling are the three of many aspects that can make an impact on long run direction of the export organization. Therefore, it is stated that Sri Lanka has a poor promotion strategy because Sri Lanka is not strategized around the three aspects mentioned above.

Sales Revenue and Strategy for Marketing Information

This study proves that Sri Lankan exporters of ornamental horticultural products have a poor strategy for marketing information (F computed = -22.170, F table = 1.65 at 5%). The strategy for marketing information can cause changes in sales revenue (F computed = 77.421, F table = 3.96 at 5%). The positive linear relationship between sales revenue (Y) and strategy for marketing information (X₃) can be represented by following equation;

$$Y = 1.164 + 2.103X_3$$

Above positive mutual relationship (coefficient of correlation = 0.273) explains that the superior the strategy for marketing information the better the sales revenue.

Interaction of Strategy of Product, Promotion Strategy and Strategy for Marketing Information on Sales Revenue

The linear relationship between product strategy (X₁), promotion strategy (X₂), strategy for marketing information (X₃) and sales revenue (Y) is found to be as follows;

$$Y = - 4.744 + 1.201X_1 + 1.996X_2 + 1.41X_3$$

Also, the above relationship is very strong (R²=0.639). The combination of three independent variables more properly explain the variation in sales revenue (F computed = 63.756, F table = 3.96 at 5%). The interaction of three strategies adequately explain the sales revenue (F regression = 21.227, F table = 2.86 at 5%).

This study serves the important purpose of quantifying the product strategy, promotion strategy and the strategy for marketing information and key factors; product innovation, breadth of product assortment, manipulation of product assortment, reliability of delivery, frequency of advertising, participation in trade fairs, frequency of personal selling, market information from main markets, resource allocation in search of market information, activities of local organizations for horticulture and marketing intelligence. It also correlates all the three variables and the combination of them to sales revenue, which is the final objective of all business entities. These 11 key factors, which are strategically important, were quantified on a five point Likert Scale and a value of three is considered as the average acceptable level.

Table 4: Basic Statistics of Key Factors.

<i>Key Factor Indicating the Independent Variable</i>	<i>Mean Observed Value</i>	<i>Coefficient of Correlation (Factor Vs Sales Revenue)</i>
Product		
Product innovation.	2.100	0.13
Breadth of product assortment.	3.375	0.35
Manipulation of product assortment.	2.150	0.49
Reliability of delivery.	3.440	0.34

Promotion		
Frequency of advertising.	1.200	0.24
Participation in trade fairs.	1.750	0.65
Frequency of personal selling.	2.950	0.61
Marketing Information		
Market information from main markets.	2.510	0.20
Resource allocation in search of marketing information.	2.030	0.06
Activities with local organizations for horticulture.	2.190	0.32
Marketing intelligence.	1.930	0.02

(Expected value is 3.00)

1. Product Innovation

Product innovation is a requirement for long-term viability of a business entity with a particular reference to exports. This study reveals that the mean value of Sri Lankan product innovation is lower than expected levels (Mean value = 2.10, expected value = 3.00). Sri Lankan exporters introduce a new product between once a year and once in two years. This implies a vast gap between basic innovative idea and final refined product. Therefore, bridging this gap has to be done by entrepreneurs with state intervention. This study shows that improvement in product innovation improves sales revenue (coefficient of correlation = +0.13).

Around the world, new plant and flower varieties are being brought into commercial trade. The path for sustainable competitive advantage is to create new products frequently. None of the respondents in the sample have been able to get "patent rights" for own plants. Only 7% of respondents have been able to secure "grower's rights" from inventors in Holland. These clearly say that Sri Lanka lacks innovation and product uniqueness. Fear of losing cost advantage exists due to rising cost of production. However, with Sri Lanka's favorable agro-climatic conditions, plant species diversity and managerial expertise of entrepreneurs, avenues of differentiation and focus are still available. Research back up should be strengthened to ensure constant supply of new varieties to growers based on the requirements of main world markets. Also, intensive research on post-harvest activities such as grading, packaging and quality improvement of export products is necessary for an innovation to be sustained.

2. Breadth of Product Assortment

This study shows that the breadth of product assortment is satisfactory under Sri Lankan conditions (observed value = 3.375). The breadth of product assortment has a positive effect on sales revenue (coefficient of correlation = 0.35). Most customers in the main markets like to see a broader product assortment to choose from (Senadeera, 1999).

Entrepreneurs should decide rationally on product assortment strategy. Product strategy decisions should maintain a trade-off between broader assortments though bears a high risk, and profitability through adequate focus. Also, the assortment has to be skillfully and deliberately changed according to the market

trends and forecasts. Marketing information, which will be dealt later, has a great role to play here.

3. Manipulation of Product Assortment

This is a highly and positively contributory factor to sales revenue (coefficient of correlation = 0.49). Product assortment should be changed constantly for attraction as the manipulation of product assortment has the power to elevate the sales revenue. However, this study reveals that Sri Lankan entrepreneurs do not adequately make changes in the product assortment (observed value = 2.150).

4. Reliability of Delivery

The ability to deliver the product punctually and promptly could be a strong differentiating factor (Wilson, 1991: 188). Ninety three percent of the ornamental horticultural products (according to value) are exported as air cargo. However, Sri Lankan exporters have identified limited air cargo capacity as one of the major constraints. (SLEDB, 1993). Delivery of shipments of Sri Lankan exporters of ornamental horticultural products is not reliable according to the study. Only 7.5 percent of respondents never short ship on export orders while 75 percent, 15 percent and 2.5 percent short ship about 25 percent, 50 percent and 75 percent respectively on their export orders. This study shows that the reliability of delivery improves the sales revenue (coefficient of correlation = 0.34). Short-shipping of any degree is unacceptable as far as exports are concerned. Therefore, Sri Lankan exporters must improve the reliability of delivery in order to achieve improved sales revenue.

5. Frequency of Advertising

Sales can be improved by more and better advertising (D'Souza & Rao, 1995: 19-26). Effective advertising in export trade can create a lasting image of quality and value in the minds of customers overseas (Killough, 1978: 36-44). Results show that the frequency of advertising by exporters is extremely poor (mean value = 1.20). None of the exporters advertised on Internet or in any other network. Internet and other networks are the most widespread advertising media within the current business context. Only 7.5 percent of the exporters advertised on foreign magazines and other available media. Even these exporters, are advertising about once in six months. Also, this study found out that higher frequency of advertising improves sales revenue (coefficient of correlation = 0.24).

6. Participation In Trade Fairs

Participation of Sri Lankan exporters in trade fairs is extremely poor (mean value = 1.75). This means that they are not meeting the prospective buyers regularly. Forty three percent of the exporters never participate in foreign trade fairs. Forty percent of the exporters participate in one to three trade fairs per year on average while 17 percent are participating in four to six trade fairs on average per year. This is a very unsatisfactory scenario. The study found out that this poor participation is due to financial barriers and that government and other related trade organizations do not seem to provide necessary facilities. This study also show that participation in trade fairs is strongly and positively correlated with sales

revenue (coefficient of correlation = 0.65). Sri Lankan entrepreneurs in export trade of ornamental horticultural products must pay a special attention on participation in trade fairs with a view to improve sales revenue. This may add to the cost. But the payoffs are tremendous in the long run.

7. Frequency of Personal Selling

Personal visits are an important mode of promotion (Pezeshkpur, 1979: 47-52). The study reveals that entrepreneurs themselves, their agent stationed at the distant end or both simultaneously visiting customers, do personal selling. Frequency of personal selling has a strong positive influence on sales revenue (coefficient of correlation = 0.61). It is revealed that frequency of firm's representatives visiting existing and potential buyers is not adequate (mean value = 2.95) as a strategy to overcome competition. Sixty three percent of the exporters pay visits to their buyers and potential buyers once a year or less often and 20 percent pay visits once in about six months. This is an unbelievably poor situation. This study reveals that this is mainly due to financial reasons and the exporters' inability to assess potential benefits of personal selling. Sri Lankan entrepreneurs should stress some more on personal selling since it has a strong positive correlation with sales revenue.

8. Marketing Information from Main Markets

The main markets and its environment are changing very rapidly. Exporters also must keep pace with this change to achieve sustainability. The key to success here is gathering information about the changes in the marketplace. Gathering of marketing information has a positive effect on sales revenue (coefficient of correlation = 0.20). The study reveals that gathering of marketing information is not adequately done by exporters (mean value = 2.51). Exporters should be active in search of marketing information, to become successful. This study reveals that 60 percent of exporters never search through the Internet in search of information about buyers. Only seven percent of companies search through the Internet once a month or more often. This is surprising as the Internet is so popular and rapid in providing information and that exporters are not making use of it. Training of personnel for market information gathering, analysis and collation of information would help increasing exports.

9. Resource Allocation In Search of Marketing Information

Resource allocation in search of marketing information shows a very weak but positive effect on sales revenue (coefficient of correlation = 0.06). Sri Lankan exporters do not allocate adequate resources in search of marketing information (mean value = 2.03). Only five percent of companies operate with a separate department for gathering of marketing information. Forty five percent of companies never allocate personnel and 32 percent of companies never allocate funds on gathering marketing information. This displays that Sri Lankan exporters are very weak in this respect. This should be improved if exporters wish to operate as healthy and sustainable business ventures.

10. Activities With Local Organizations For Horticulture

Activities with local organizations for horticulture such as Export Development Board, has a positive effect on sales revenue (coefficient of correlation = 0.32). Study shows that exporters are poor in using this strategy (mean value = 2.190). Promotional activities can be intensified through various government bodies such as Export Development Board, Ministry of Trade Ministry of Industries etc. One of the most important aspects is ensuring coordination with various local and as well as foreign organizations.

11. Marketing Intelligence

Marketing intelligence should be relevant, directed and dynamic. It has a weak but positive relationship with sales revenue (coefficient of correlation = 0.020). Sri Lankan exporter is very weak in adopting this strategy (mean value = 1.930). Fifty percent of exporters were of the opinion that they do not want to maintain a data bank about local competitors while 28 percent wanted a data bank but not started as yet. Twenty two percent of respondents have collected some data. Sixty three percent, 27 percent and 10 percent of the exporters have a weak understanding, have a fair understanding and have a good understanding about activities of local competitors, respectively. Ninety three percent of the respondents were of the opinion that they do not want to operate a data bank about foreign competitors and 57 percent have a weak understanding about what their foreign competitors are doing while 43 percent had a fair understanding. This clearly show that Sri Lankan exporters are weak in their approach towards marketing intelligence. The information collected through marketing intelligence should be skillfully and objectively analyzed and the results will have to be used as a basis for future planning and implementation.

Above factors should be used as strategies at scores well above four to be considered as working towards a competitive advantage. In general, Sri Lankan exporters do not adopt these 11 factors as strategies at a satisfactory level. The economic liberalization in 1977 committed Sri Lanka to a new policy with focus on productivity, efficiency, and modernization with an export-led orientation. In a broader sense, one of the major components of this new economic policy was the export perspective. This context expects a close integration of the national economy with extremely competitive global markets. Therefore, the competitiveness in all of the above 11 parameters will take the whole nation into a strong position in the marketplace thereby winning a higher market share, as a country in the main world markets.

This study revealed that, 73 percent of companies exporting ornamental horticultural products, are small businesses; some are family companies. Major problems that these companies face were identified as follows;

- Creative innovation demands for people with considerable education, technical know-how, and unusual yet creative abilities. These companies have tremendous difficulty in retaining such people.
- Lack of long-range orientation and development plans.
- Lack of managerial expertise.
- Research and development is expensive. Extensive marketing research and market assessments are beyond the financial capabilities of the small companies. Companies lack funds to allocate for those. Therefore, they concentrate on existing product span.

- J Even if a company is successful in developing a new product, it is likely to face formidable competition from industry when larger companies copy the new product.

Conclusion

Export of Ornamental Horticultural Products has become a significant sector in Sri Lanka's exports. Pre-research studies showed that Sri Lanka has a small and a diminishing market share in the main world markets for ornamental horticultural products. It is suggested that the problem exists due to Sri Lanka's inability to respond to growing competition. The most important challenge the modern firm faces is the development and implementation of effective strategy. This study suggests that the effective strategy in the industry of export-oriented production of ornamental horticultural products should include product strategy, promotion strategy and strategy for marketing information. It is found out in this study that Sri Lanka has a poor strategy of product, poor promotion strategy and a poor strategy for marketing information.

Linear relationships between sales revenue (Y), product strategy (X₁), promotion strategy (X₂) and strategy for marketing information (X₃) and the interaction effect can be represented by the following mathematical models;

$$Y = 0.989 + 1.532X_1$$

$$Y = 1.292 + 2X_2$$

$$Y = 1.164 + 2.103X_3$$

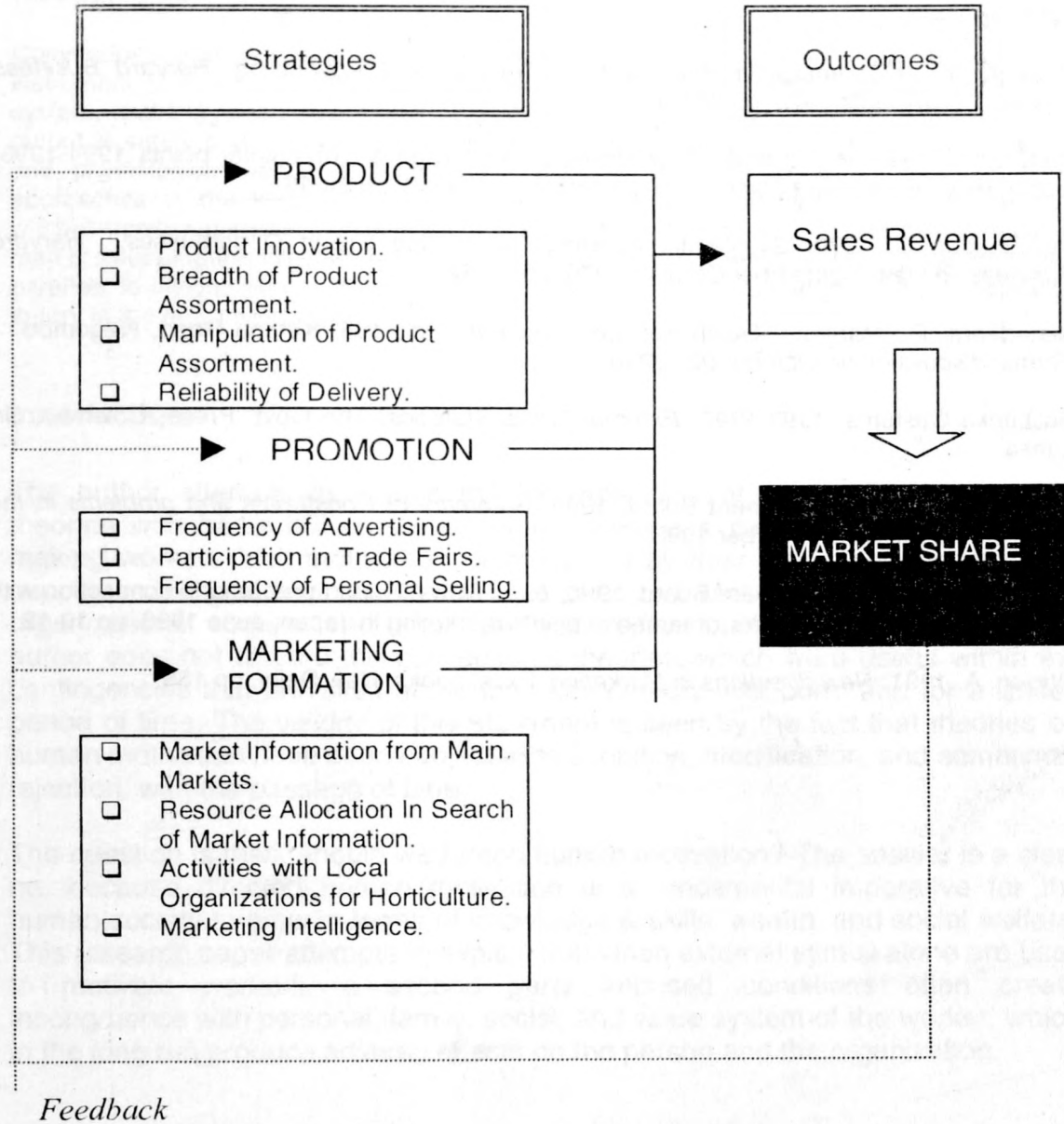
$$Y = -4.744 + 1.201X_1 + 1.996X_2 + 1.41X_3$$

All the three strategies are positively correlated to the sales revenue and the interaction of all three strategies has a very strong positive effect on sales revenue. This means that the better use of product strategy, promotion strategy and strategy for market information enhance the sales revenue. Two components of product strategy; reliability of delivery and breadth of product assortment have been satisfactorily adopted by exporters and the components; product innovation and manipulation of product assortment have not been satisfactorily adopted by Sri Lankan exporters. All these four components can influence the sales revenue positively.

This study has found out that frequency of advertising, participation in trade fairs and frequency of personal selling; the three components of promotion strategy, have been poorly adopted as strategies by Sri Lankan exporters. These three aspects have the ability to influence the sales revenue positively with varying degrees. Gathering of marketing information, resource allocation in search of marketing information, activities with local organizations and marketing intelligence; the four components of strategy for marketing information also have been poorly administered by exporters. This study reveals that these four components can positively influence the sales revenue, which is a determinant of market share.

The findings of this study can be presented in the following model (Figure 1) to show the relationships between strategies and their outcomes.

Figure 1: Components of Marketing Strategy Towards Higher Market Share



PERMANENT REFERENCE
Sabaragamuwa University Library

References

- Benjamin, R.E. Hariharan, S.V. Karunagaran. M. 1989; *Economics of Agriculture*. S. Chand & Co., New Delhi, pp 7-8.62
- Degamboda, S. 1992; *Export Marketing, Module 5*, The Open University Diploma in Marketing, The Open University Press, pp 2-8.
- D'Souza, G., Rao, R. C. 1995; Can repeating an advertisement more frequently than competition affect brand reference in a mature market?. *Journal of Marketing*. Vol. 59, April 1995, pp 19-26.
- Killough, J. 1978; Improved Pay-offs from Transnational Advertising. *Harvard Business Review*. July/August 1978, pp 36-44.
- Pertwee, J. 1998; World trade in cut-flowers, cut foliage & ornamental plants 1994-1996. *International Floriculture Quarterly Report* Volume 6 No. 3, pp 28-48.
- Pezeshkpur, C. 1979; Systematic Approach to Finding Export Opportunities. *Harvard Business Review*, September/October 1979, pp 47-52.
- Senadeera, P., Manager, Dutch Foliage Farm Pvt. Ltd., 103, Katana Road, Negombo . *Formal discussion on October 06th* 1999.
- Sri Lanka Customs, 1993-1997; *External Trade Statistics*, The Govt. Press, Colombo, Sri Lanka.
- Sri Lanka Export Development Board, 1993; *Summary of Constraints and problems in the floriculture industry*, November 1993.
- Sri Lanka Export Development Board, 1996; *Expo News*, Report prepared in connection with JETRO Report on Sri Lanka's ornamental plants marketing in Japan, June 1996, pp 10-12.
- Wilson, A. 1991; *New directions in Marketing*, Excel books, New Delhi, pp 188.