THE EFFECTIVENESS OF FLORICULTURE AGROCHEMICALS DISTRIBUTION IN KENYA: A CASE STUDY OF BAYER CROP SCIENCE LIMITED

BY
KITHINJI ANAMPIU

A Project report Submitted to the School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration

UNITED STATES INTERNATIONAL UNIVERSITY
NAIROBI

SUMMER 2004
STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: Kithinji J. Anampiu (ID. 608487)  Date: 3rd July 2004

This project has been presented for examination with my approval as the appointed supervisor.

Signed: Mr. Bernard Kinyungu  Date: 5-7-2004

Signed: Dean, School of Business.  Date: 7-7-2004

Signed: Deputy Vice Chancellor, Academic Affairs.  Date: 12th July 2004
Abstract

As globalisation takes centre-stage of today’s marketing world, so does competition. With this in mind, marketing managers must use an effective system that delivers goods and services to the target market in the quantities required and within the desired time. High quality products cannot be marketed effectively when improper channels are used or when problems occur within proper channels.

The agrochemical industry in Kenya and more so the sensitive floriculture sector has an ineffective distribution system that affects the business of companies. Bayer Crop Science (BCS), E. A. Ltd, is one of the leading players in this sector and has not managed to develop an effective physical distribution strategy. In order to develop a competitive strategy, research focusing on purchasing behaviour of flower farms and flower sector distributors (intermediaries) was conducted.

A questionnaire was used to gather primary data from a random sample of flower farms in Kenya. Secondary data was obtained from magazines, journals and text books. Data gathered was then analysed by Statistical Packages for Social Sciences (SPSS) and Excel and presented in frequency tables, pie charts and bar graphs.

The study revealed that the flower sector would like a wide range of products available on short notice and a credit period of at least two months. The critical factors that influence customer preferences and their purchasing behaviour are price offered and product range availability under one roof. The findings also revealed that farms would like product delivery and value added by the supplier in terms of technical support and training on pests and disease management issues.
Based on the discussion derived from the results and findings it is clear that a hybrid of use of existing distributors and direct sales to some flower farms will be the best way forward. A cost benefit analysis of delivering the product direct to flower farms should be undertaken. The distributors in the sector need to be increased and all the players given a level playing field in terms of credit terms, discounts, and support from Bayer Crop Science. A selected number of farms with thorough scrutiny done should be considered for direct sales, but with the leeway to opt for purchase from the distributors if they so wish.
Acknowledgements

The author would like to sincerely thank all those who have made the effort of piecing up this research project a success without whose contribution and moral support it would have been truly difficult.

Special mention of Mr. Kinyungu who supervised the process of preparing the document as well as the other lecturers who played a major part in the program to you all thank you very much.

The assistance of my colleagues at Bayer East Africa with ideas, in gathering data especially Mary, Francis, Maina and Patrick may the almighty God bless you. To all the flower farm managers who spared time from their busy schedules to contribute towards the success of this project I wish to specially appreciate your support.

Since it may not be possible to mention everyone who has contributed in one way or another my sincere and heartfelt regards go to all of you. I would like to thank the Almighty God for all he has endowed me with without which none of this dream would have come true.
Dedication

This project is dedicated to my loving wife Jesca, our son Murithi, my parents and my sisters Agnes, Eileen, Susan and Mercy. I love you all and wish to thank you for your moral support and encouragement. May the Almighty God who blesses and provides for us be with you always.

Kithinji.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student’s declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>v</td>
</tr>
<tr>
<td>Dedication</td>
<td>vi</td>
</tr>
<tr>
<td>List of tables</td>
<td>ix</td>
</tr>
<tr>
<td>List of figures</td>
<td>x</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION

1.0 Introduction ........................................ 1
   1.1 Background of the study ........................... 1
   1.2 Statement of the problem .......................... 4
   1.3 Purpose of the study .............................. 5
   1.4 Justification of the study ....................... 5
   1.5 Scope of the study ................................ 6
   1.6 Definition of terms and abbreviations .......... 7
   1.7 Summary ............................................ 8

## CHAPTER TWO: LITERATURE REVIEW

2.0 Literature Review ................................. 9
   2.1 Definition and concepts on distribution channels .. 9
   2.2 Distribution Policies .............................. 10
   2.3 Distribution channels and factors that influence choice. 11
   2.4 Physical Distribution ............................. 16
   2.5 Business channel strategy formulation ............ 18
   2.6 Marshalling resources for channel management .... 19
   2.7 Summary of Literature review ..................... 22
# CHAPTER THREE: RESEARCH METHODOLOGY

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Research methodology</td>
<td>24</td>
</tr>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>24</td>
</tr>
<tr>
<td>3.2</td>
<td>Research design</td>
<td>24</td>
</tr>
<tr>
<td>3.3</td>
<td>Population and sample</td>
<td>25</td>
</tr>
<tr>
<td>3.4</td>
<td>Data collection</td>
<td>26</td>
</tr>
<tr>
<td>3.5</td>
<td>Research procedures</td>
<td>26</td>
</tr>
<tr>
<td>3.6</td>
<td>Data analysis methods</td>
<td>27</td>
</tr>
<tr>
<td>3.7</td>
<td>Summary</td>
<td>28</td>
</tr>
</tbody>
</table>

# CHAPTER FOUR: RESULTS AND FINDINGS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>Results and findings</td>
<td>29</td>
</tr>
</tbody>
</table>

# CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>Discussions, Conclusions and Recommendations</td>
<td>47</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Introduction</td>
<td>47</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Summary</td>
<td>47</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Discussion</td>
<td>48</td>
</tr>
<tr>
<td>5.1.4</td>
<td>Conclusions</td>
<td>50</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Recommendations</td>
<td>52</td>
</tr>
</tbody>
</table>

References | 57   |

Appendix I  |
| Letter of Introduction for flower farms | 59   |

Appendix II  |
| Flower farms questionnaire | 60   |

Appendix IV  |
| Distributors questionnaire | 67   |
List of tables

Table 1: Allocation of flower farm managers in agrochemical purchasing decisions
Table 2: Allocation of flower farm managers in choice of agrochemicals decisions
Table 3: After sales services offered to farms by distributors
Table 4: Other products supplied by distributors in addition to agrochemicals
Table 5: Credit period in days offered to flower farms by distributors
Table 6: Main weaknesses of distributors identified by flower farm managers
Table 7: Main strengths of distributors identified by flower farm managers
Table 8: Reasons for switch from distributors by flower farms
Table 9: Frequency of ordering of agrochemicals by flower farms
Table 10: Timeliness of agrochemicals delivery to flower farms by distributors
Table 11: Preference of flower farms sourcing from manufacturers directly
Table 12: Benefits anticipated by flower farms sourcing directly
Table 13: Comments from flower farms on distribution of agrochemicals
Table 14: Ranking of factors considered by flower farms in choice of distributors decision
Table 15: Weighting of factors considered for decision making
Table 16: Ranking of factors considered for decision making (by farm) by distributors
Table 17: Weighting of factors considered for decision making (by farm) by distributors.
List of figures

Figure 1: Makers of purchasing decisions
Figure 2: Makers of choice of agrochemical decisions
Figure 3: Delivery of agrochemicals to flower farms
Figure 4: Other products supplied to farms by distributors
Figure 5: Mode of payment for agrochemicals by flower farms
Figure 6: Credit period offered to flower farms by distributors
Figure 7: Main weaknesses of distributors identified by flower farms
Figure 8: Main strengths of distributors identified by flower farms
Figure 9: Switch from preferred distributors
Figure 10: Reasons for switch from preferred distributors
Figure 11: Frequency of orders to distributors from flower farms
Figure 12: Benefits from direct purchase from principals
Figure 13: Weighting of factors by flower farms
Figure 14: Amiran % business by suppliers
Figure 15: Elgon % business by suppliers
Figure 16: Weighting of factors by distributors in the flower sector.
CHAPTER ONE

1.0 Introduction

1.1 Background of the problem

Distribution is one of the 4Ps of the marketing mix and it is the means by which customer needs and wants are satisfied by an organisation offering and thus forms an integral part in the business process. An important marketing maxim states that, “consumption is a function of availability”. Distribution has been viewed as the long neglected side of marketing, but this attitude is changing. The rising cost of personal selling, coupled with the economic forces that are pushing inventory-carrying costs, and transportation costs higher have led to the need for careful assessment of the alignment of marketing channels.

Kenya is an agricultural economy and the demand for agrochemicals is thus a reality. This has led to the players in this business increasing and with them competition has taken centre stage. The main sectors in the agriculture however, have lately been strategically led to their death i.e. the coffee, cotton, sugarcane, etc. This has left the general horticulture sector and more specifically floriculture as the only viable target sector for the agrochemical companies. The overseas markets are imposing stringent rules and conditions and globalization is also playing its rightful role. Coupled with this is the entry of more players into the industry with generic products.

In Kenya the floriculture sector accounts for close to a third of the total turnover (value) of the agrochemical industry. The major players in this specialized sector are Bayer CropScience, Syngenta, Elgon Chemicals (representing BASF), Osho Chemicals
(representing Tata Rallis), Amiran(K) Ltd (for Makhteshim Agan) and Twiga Agriculture amongst others. With competition being cutthroat, the need for a strategy to have a better foothold in this market is crucial.

The distribution or channel strategy has for long been left to trial and error and hence chance, but this can no longer be so due to competition and new developments owing to mergers, multinationals pulling out and giving products exclusively to those previously deemed as distributors, etc. BCS has taken the lead and hopes to address the issue of the channel strategy so as to gain competitive advantage.

Bayer Crop Science, East Africa is a subsidiary of Bayer Crop Science, Germany and locally deals with agrochemicals. Bayer Crop Science came into being after Bayer AG crop protection bought Aventis Crop Science. BCS is the largest agrochemical company in Kenya having a share of 19% of the total market and 28% of the floriculture agrochemical products market. The company also serves neighbouring countries including Uganda, Tanzania, Rwanda and Burundi. Bayer Crop science has been distributing its floriculture products through two key distributors i.e. Elgon chemicals, and Amiran (K) Ltd while Hygrotech and Supplies & Services play a minor role. However, recent developments have led Elgon to get exclusivity on BASF products (a BCS competitor) while Amiran continues unabated to register generics hence in reality acting as competitors. Hygrotech though trying to penetrate this sub sector is facing stiff competition aimed at locking them out. This has prompted the company to start thinking of a strategy on distribution that would counter the negatives being experienced. Some of the key disadvantages of the current scenario include substitution of BCS products with
their products, and informing customers of false shortages aimed at making them take their substitute products. Other negatives include overpricing of BCS products, cases of adulteration as well as incidences of expired products. The distributors do not offer any technical-marketing back up for BCS save to physically distribute and collect debts for products supplied. For these services they are offered 75 days credit period and 10% discount from the main distributor price. The distributors offer the flower farms the products at a price of main distributor and occasionally load a make up on top. They give a credit period of between 30 and 60 days.

In view of the prevailing conditions several alternatives are being considered and include that of dealing direct with the flower farms, part direct to the main farms coupled with use of distributors. Other options being considered are use of consignment stock to one or two of the distributors as well as giving products exclusively to the key distributors in an effort to stop them from introducing more generics while also containing further promotion of their already registered products. This requires a thorough scrutiny of the sector in order to incorporate the aspects of the various players and also consider the viability of any new distribution option.

This has to be in tandem with the company policies on distribution in other sectors. In the small scale sector key dealers have been identified that service end users via distributors and stockists. In the cereals sector seasonal credit is given direct to the farmers with charges on extended credit being put into consideration when calculating the prices. In the large scale sugarcane sector and coffee direct distribution methods are used while in the small scale coffee sector the company services the market through the accounts in the cooperative movement. A look into the way forward is thus a priority.
1.2 Statement of the problem

The floriculture sector agrochemical distribution in Bayer Crop Science has faced major obstacles that have impacted negatively on its performance in the market. A major factor is that owing to the main distributors as well as small ones dealing on behalf of BCS registering and distributing competing generic products. These generics are direct substitutes to the BCS range and are sold at lower prices. Owing to the fact that these distributors are also the registrants and suppliers of the generics, they frequently substitute orders of the customers with their generics. In a bid to penetrate the market they also offer higher prices for BCS products and inform customers that products are out of stock.

Elgon Chemicals, a key distributor was recently appointed an exclusive dealer for BASF hence in principle a competitor. This key distributor happens to do a fifth of the total BCS business thus a very worrying situation. The distributor enjoying exclusivity is offered better margins by the principal while the generic companies also offer their appointed dealers higher operating margins to allow them compete effectively.

The distributors servicing the sector presently are barely conduits given goods on credit and do not add value to the products through technical support and marketing.

All these problems coupled with the loss of revenue through discounts offered to the distributors have led to the current distribution scenario requiring urgent address to clearly identify its weaknesses and strengths. This is in a bid to map out the way forward as concerns distribution for BCS and the floriculture agrochemical industry in general.
1.3 Purpose of study (General Objective)

To analyse the effectiveness of the distribution channels for agrochemicals in the floriculture sector in Kenya.

Specific objectives

i) To identify the current agrochemical distribution channels in the floriculture sector and highlight their weaknesses and strengths.

ii) To determine customer preferences and purchasing behaviour with reference to the current distribution trend.

iii) To identify and recommend an effective distribution channel for the Bayer E. A. Floriculture sector agrochemicals.

1.4 Justification of the study

The research is hoped to improve the distribution of agrochemicals in the floriculture sector for Bayer Crop Science, E.A Ltd and thus increase its overall turnover. It will also help identify the areas that need urgent addressing in the current distribution channel, in order to improve service delivery.

The study is intended to act as a guide on the way forward in the ever increasing competitive floriculture agrochemical sector and as a counter to the eminent generic threat. There will be improved access of agrochemicals to the flower farms at the right time and at affordable prices owing to enhanced distribution systems that are cost effective. Owing to enhanced distribution channels it is hoped that the flower farms will access the original molecules that are superior in performance while curtailing any incidences of adulterated products. The study will act as a guide to the
distribution of agrochemicals in the floriculture sector for business purposes as well as for academic purposes. The results of the study will sustain and if possible create employment in the agrochemical distribution line in BCS.

The report will facilitate the creation of cost effective distribution channel and enhance the profitability of the BCS floriculture products. It will also open up the academic realm of agrochemical distribution for the local conditions in the floriculture sector as well as the other sectors.

1.5 Scope of the study

The study involved the flower farms in Kenya mainly in the flower area concentrations of Nairobi area and its environs, Naivasha, Nakuru and Eldoret areas. Farms that are isolated in other areas of Kenya were not considered due to limitation of finances and time. Of the farms in the main concentration a third of them were targeted in order to have a representative sample.

The farms targeted were the medium to large scale ones thus no focus on the many small scale summer flower growers who also are critical in the flower sector agrochemical business. The list used for sampling was based on data gathered by BCS personnel and other interested parties in the flower sector.

The flower sector and distribution issues are dynamic and hence the information gathered may in some cases be overtaken by events or will have changed due to competition and market forces thus may need reviewing periodically.
1.6 Definition of terms and abbreviations

BASF : German abbreviations for one of the leading agrochemicals and industrial chemicals manufacturers with German origin

BCS : Bayer Crop Science

MAK : Makhteshim Agan (Kenya)

One stop shop: A purchase point or supplier where under one roof the customer can get all or nearly all requirements for a certain venture for example farming.

Agrochemicals: Chemicals or products that are used for pests and disease control and protection in farming.

SPSS : Statistical Packages for Social Sciences

Hybrid distribution channel: A mix of more than one distribution channel for example the use of direct sales to the end user of a product while also using intermediaries to supply the end users of the products.

Principals / Manufacturers: The owners of the product by way of manufacturing or having bought the product exclusively from the original owners.

Generics: Products that are produced by other manufacturers after the patent of the original molecule has expired but with a different trade name.

Floriculture: The science of cultivation of flowers, their production and various other processes involved in ensuring the success of the final product, the flower.
1.7 Chapter summary

The purpose of the research project is to look at the effectiveness of the current BCS floriculture agrochemical distribution channel with the aim of identifying its strengths and shortcomings and come up with a suitable and sustainable distribution strategy. This is occasioned by the importance of the growing and stable sector to BCS and the agriculture sector at large. The aim is to improve the distribution of agrochemicals in the flower sector and increase the overall profitability of BCS while acting as a reference for distribution of agrochemicals in Kenya.

A background into the problem is provided but the main issue is that the current two main distributors Amirn and Elgon are also acting as competitors since they have exclusive dealership with other principals whose products they have loyalty to. An analysis of flower farms and distributors of agrochemicals will facilitate the design of distribution strategy. The justification of the project is based on a felt need since the major agrochemical companies are groping in the dark trying to come up with the most cost effective way forward.

The key terminologies and abbreviations used are explained to facilitate understanding of the report. Other details are included in the following chapters with an elaborate literature review, research methodology, results and findings which are followed with discussion, conclusions and recommendations as per the findings. Attached in the appendix are the flower farms and distributors questionnaires.
CHAPTER TWO

2.0 Literature Review

2.1 Definition and concepts of distribution channels

For the marketing manager, the development or acquisition of quality products or services must be accompanied by channels of distribution that deliver these goods and services to the target market in the quantities required and within the desirable time. High quality products cannot be marketed effectively when improper channels are used or when problems occur within proper channels (Haas R. W., 1992).

The primary function of a channel of distribution is to provide a link between production and consumption by filling any gap or discontinuity. It also aims at increasing consumer satisfaction through improving efficiency and thereby reducing costs and uncertainty through routinization of transactions. According to Kotler (1997) business success is not determined by the producer but the consumer. Theodore Levitt further clarifies this in his 'Marketing Myopia' article where he addressed the fundamental question of why firms and indeed industries grow to a great position of power and influence and then decline. Citing the example of American railroad industry where the management was too preoccupied with their product to the neglect of the need that it served which is transportation.

Despite its importance, distribution remains largely a neglected issue in marketing and in the 1960s, Peter Drucker characterised it as 'the economy’s dark continent'. He pointed out that while distribution function accounted for between 30-50% of the total cost of
manufactured goods, it received comparatively little attention. Channels of distribution have been defined by Stanton (1975) as the route taken by the title to goods as they move from the producer to the ultimate consumer. The best distribution channel is one that maximises profit. Distribution deals with the availability and accessibility of products and services considering physical access, time access, as well as informational and promotional access (Kotler, 1997). The distribution system serves as a major source of competitive advantage and hence management should make sound distribution channel decisions (Baker M., 1992).

The importance of distribution is seen in the success of Imperial Chemical Industry’s Ambush insecticide in securing almost 50% of total sales to USA cotton growers in its launch year. The dominance of caterpillar in the world heavy construction and mining market has been attributed to distribution and product support and the close customer relationships it fosters. The backbone of that system is its 186 dealers who sell and service their equipment worldwide (Donald files, Caterpillars chairman and CEO as quoted by Armstrong and Kotler, 1999).

**2.2 Distribution Policies**

According to Palmer and Hartley (1999), the type of product, nature of product, the abilities of intermediaries and the expectations of consumers influence the design of a channel of distribution policy. Lancaster and Massingham (1998) advocated three categories:
i) **Intensive distribution**

This is commonly adopted by manufacturers of convenience goods and places burden on advertising and promotion. Retailers rely on manufacturers’ input in ensuring that the product moves off their shelves. The products are placed in as many outlets as possible in order to achieve maximum exposure.

ii) **Selective distribution**

This covers a wide range of distribution intensity and is adopted when one has few outlets in a particular market. The aim is to show products in the most promising or most profitable outlet only. It is useful to manufacturers of consumer speciality goods and industrial accessory equipment for which most customers have a brand preference.

iii) **Exclusive distribution**

Here suppliers enter agreements of exclusive distribution policy with particular wholesaling middlemen, whereby the supplier will only sell to the wholesalers or retailers in a given market. It is mainly used when firms have difficulty in establishing a distribution system and to market speciality products.

2.3 **Distribution Channels and factors that influence choice**

1. Manufacturer → Customer
2. Manufacturer → Retailer → Customer
3. Manufacturer → Wholesaler → Retailer → Customer
4. Manufacturer → Wholesaler → Customer
**Distribution channels and wholesaling**

Marketing channels consist of firms involved in the process of making a product available for use by consumers. Intermediaries create value by facilitating the flow of products to the consumers by performing three basic functions.

- **Transactional function** involves buying, selling and risk taking.
- **Logistical function** is the gathering, storing and dispersing of products.
- **Facilitating function** is assistance in making products that are appealing to customers.

Ndegwa M. (2002) undertook research on factors that improve the key dealer distribution system. Data was collected using an open and closed ended questionnaire. Ndegwa used survey method in order to explore the attitude of the respondents towards the agrochemical industry. According to the research results, consumers prefer dealers whose products are popular and render reliable service. In conclusion Bayer CropScience was the preferred supplier of agrochemicals.

**Proposed Distribution structure**

<table>
<thead>
<tr>
<th>Type of structure</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer – Key dealer – Consumer</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturer – Key dealer – Distributor – Consumer</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturer – Key dealer-Distributor – Retailer – Consumer</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

*Source: Research data, Ndegwa M. (2002)*
Sixty six percent (66%) of the samples preferred Manufacturer – Key dealer – Distributor – Retailer – Consumer distribution structure. Twenty eight percent (28%) of respondents felt that the Retailer link should be removed. The respondents also felt that the longer chain makes the product more expensive to the final consumer.

Factors considered when ranking suppliers.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Respondents</th>
<th>Total respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference of products by customers</td>
<td>16</td>
<td>21</td>
<td>76</td>
</tr>
<tr>
<td>Services</td>
<td>15</td>
<td>21</td>
<td>71.4</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>11</td>
<td>21</td>
<td>52.3</td>
</tr>
<tr>
<td>Credit facility</td>
<td>11</td>
<td>21</td>
<td>52.3</td>
</tr>
</tbody>
</table>


The findings indicated that preference of products and services were given greater weight than profit margin and credit facilities.

Exclusive dealership

<table>
<thead>
<tr>
<th>Respondents against exclusive dealership</th>
<th>Respondents for exclusive dealership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18</td>
<td>3</td>
</tr>
</tbody>
</table>


From the above table 85% of the respondents prefer dealing with multiple suppliers instead of one supplier.
Customers gave the following reasons for preferring to deal with several suppliers instead of one.

- It was risky dealing with one supplier in case the supplier shifted base.
- Exclusive dealership meant signing legal contracts restricting them to buy from one supplier thus giving them a narrow range of products.
- Most suppliers did not offer the whole range of products required by the farmers.

**Trading Terms**

<table>
<thead>
<tr>
<th>Terms</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash with discount</td>
<td>18</td>
</tr>
<tr>
<td>30 days credit with no discount</td>
<td>2</td>
</tr>
<tr>
<td>30 days credit with discount</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: Research data, Ndegwa M. (2002)*

From the above table 85% of the respondents prefer to purchase on cash basis so long as they are given a discount. It can be concluded that discount is a more effective incentive than credit facility.

A research study on the agrochemical industry by Tyrell D., 2003, commissioned by Syngenta and Bayer CropScience documented that the issue of distribution in the floriculture sector is of primary concern for flower farms where 50% indicated lack of satisfaction with the current distribution system. Tyrell carried out the study using a structured questionnaire and in depth face to face interviews.
A study done on distribution of pharmaceutical products in Kenya by Agwata B. N (Case study SmithKline Beecham, 1999) looked at factors considered when selecting a distributor i.e. credit terms, discounts offered, availability of a wide range of products, good customer services, proximity to source and price advantage.

In the pharmaceutical world, distributors sold their products directly to the retailers and a few used sub-distributors. Accessibility and convenience were cited as the most important factors. The location of the distribution outlet for the pharmaceutical sector and factors considered include proximity to customer, closeness to prescribing doctor and closeness to a middle class housing estate.

In the study the choice of a distributor depends on adequate room for storage of stocks and expansion. The need for excellent delivery systems to the customers and areas accessible to the customers were also considered. The main problems of distribution identified by the study are finance and debt collection.

Sub distribution was seen to have a minimal role in the distribution of Smith Kline Beecham Pharmaceuticals. Most retailers prefer more than three distributors principally due to credit terms availability and difficulty in debt collection. In view of this, it was recommended that Smith Kline should maintain direct distribution at 30% and employ distributors on 70% of the business.

Level 2-distribution strategy advocated for adoption i.e. from SmithKline to distributor to the retailer. This would reduce price mark - up levels and increase discounts to end user, thus making its products more affordable. Customer service delivery should to be used as a standard for measuring good distributors and give incentives to improve service delivery.
2.6 Physical Distribution

Physical distribution entails the activities involved in the physical movement of goods to the target market. A study of purchasing managers randomly selected from regional associations affiliated with the National Association of Purchasing Management in the U.S.A revealed that buyers rank physical distribution second only to product quality when selecting suppliers. Thus ranked higher than price and hence buyers willing to pay more to a supplier who could ensure delivery when required. Physical distribution as mentioned earlier carries the highest cost of the 4Ps and hence when utilised can offer competitive advantage. In the same study when 2 suppliers perceived as relatively the same in product quality, price and selling efforts, the one with the shortest order cycle time may well receive the order.

**Physical distribution complements other marketing mix elements**

- If a company produces what is perceived in the target market as a high quality product, but cannot deliver in a reliable manner, the advantages of high product quality may be wasted.
- Failure to deliver on time destroys credibility of good field sales people. If reliable delivery can be assured, it may be possible to price the product higher.

According to Haas R. W., the following are the specific physical distribution objectives:

- To achieve an average order cycle time of specific number of days.
- To reduce percentage of orders that result in backorders.
- To reduce number of days involved in shipping backordered items.
- Reduce percentage of deliveries that are late.
- Reduce percentage of orders that contain damaged or defective goods.
- Reduce number of customer complaints regarding distribution.

**Advantages of distributors**

i) May offer an established sales force.

ii) Often locally owned and operated and therefore know buyers closely.

iii) Distributors stock goods reducing stocks that must be maintained and in some cases no need to have premises in which the company can operate.

iv) Can reduce the credit requirements of the business.

v) Good source of feedback.

vi) Lowers financial costs of customers.

**Limitations of distributors**

i) It is difficult to control distributors.

ii) Dominance of channel by distributor

iii) Distributor often has no technical, sales or service capabilities.

iv) Often handle competing products.

v) Distributors' look for turnover and margin and may not accept products that are slow moving.

vi) Conflicts may arise due to some direct customer sales by manufacturers.

vii) Reluctance to hold on to inventories thus stock outs and back orders occur,
2.5 Business Channel Strategy Formulation

1. Determine channel objectives to be achieved
2. Assess channel options capable of achieving objectives
3. Direct channels:
   - Field sales people
   - Inside sales people
   - Telemarketing
   - Catalogs
   - National accounts
4. Indirect channels:
   - Specialist distributors
   - General distributors
   - Combination houses
   - Manufacturer representatives
5. Select appropriate channel
6. Select channel intermediaries
7. Establish channel arrangements
8. Implement selected channels
9. Control & evaluate channels

Source: Channel strategy process in Business Marketing (Haas R. W.)
Channel strategy

Channel strategy involves determining specific channel objectives, choosing the kinds of channel arrangements, deciding whether or not to use channel intermediaries and determining what types and the number of each intermediary. Channel strategy has been termed ‘the long neglected side of marketing’ but this attitude is changing. As business customers move into new technologies e.g. Just in Time (JIT) they demand and expect closer relationships with their suppliers.

The information systems division of Hyundai electronics of America when moving into new markets first signed agreements with 4 regional distributors to serve dealers. This channel failed when distributors crossed over into one another’s territories leading to conflict and hence destruction of the channel. After interviewing dealers, and identifying the problems in the previous arrangements, they created a direct dealer channel which improved performance. A Hyundai spokesman was quoted thus ‘there’s no question that we’ve established a viable channel’. (Source: Haas R. W., 1992)

2.6 Marshalling Resources for Productive Channel Management.
Marshalling the appropriate channel resources means knowing what levers are available to induce productive behavior. In a perfect world, all channel members would have consistent worldviews and aims, and channel management would be an automatic process. But in our imperfect world, there are many reasons why channel “partners” may not always act in a partner like manner. Thus, to increase the productivity and effectiveness of the channel, its members need to use any and all mechanisms available to
produce a coordinated outcome. There are several levers that can be brought to bear to organize channel activity productively, among them the use of channel power, the development of channel commitment and trust and contract design techniques. Stern, El-Ansary and Coughlan (1996) Marketing Channels and Rosenbloom B. (1999) Marketing Channels have expounded on this issue.

**Channel power**

It is assumed that channel members are unlikely to coordinate their activities spontaneously. Only through the exertion of channel power can the actions of disparate channel members be coordinated. *Power is the ability of one channel member to get another channel member to do what it otherwise would not have done.* French and Raven (as quoted by Rosenbloom, 1999) define a power base as the source or root of the power that one party exercises over another. There are several power bases:

**a) Reward Power**

Specific rewards that may be used by individual channel members include the granting of wider margins, the allocation of various promotional allowances or other compensation elements, functional discount schemes, and the assignment of exclusive territories.

**b) Coercive Power**

Coercive power stems form B’s expectation of punishment by A if B fails to conform to A’s influence attempt. Coercion involves any negative sanction or punishment of which a firm is perceived to be capable. Examples are reductions in margins, the withdrawal of rewards previously granted and the slowing down of shipments.
c) Expert power

Expert power is derived from knowledge which one channel member attributes to another in some given area. Therefore, one channel member’s attempt to influence the other’s behaviour is based on superior expertise.

d) Referent / identification power.

According to French and Raven identification power and referent power are linked in a cause-and-effect sense. Key dealers, wholesalers and retailers who want to be identified as leading, high quality or prestigious firms will use as their reference group those manufacturers whose products are consistent with the image they are attempting to project.

e) Legitimate Power

Legitimate power stems from internalised norms in one channel member which dictate, that another channel member has a legitimate right to influence the first, and that an obligation exists to accept that influence.

Legal issues in channel management

Exclusive dealing

Exclusive dealing occurs when a supplier requires its channel members to sell only its products or at least to refrain from selling products from directly competitive suppliers.
Price discrimination

Price discrimination refers to the practice whereby a supplier, either directly or indirectly, sells at different prices to the same class of channel members to the extent that such price differentials tend to lessen competition. Discriminatory price differentials can take a variety of forms, some of which can be quite subtle.

Price Maintenance

Price maintenance refers to a supplier's attempt to control the prices charged by its channel members for the supplier's products. The supplier, in effect, dictates the prices charged by channel members to their customers. Such price maintenance arrangements can help manufacturers to gain greater control over the distribution of the products.

Resale Restriction

Resale restrictions refer to a manufacturer's attempt to stipulate to whom channel members may resell the manufacturer's products and in what specific geographical market areas they may be sold.

2.7 Chapter summary

The literature review has dealt on the importance of distribution channels in today's competitive business environment. It has also addressed the factors that should be considered when designing a distribution strategy. Distribution has not received its due attention hence leaving a glaring gap. It is against this background that the gap has been noticed in the Kenyan agrochemical industry. In an effort to fill this gap, the floriculture
industry has been identified for research. The target is specifically in relation to Bayer East Africa Limited, Bayer Crop Science, and floriculture agrochemical business.

It is worth noting that during the literature review, information available on distribution in the agrochemical sector was only in relation to the main stream small scale sector key dealers. No specific work concerning distribution in the flower sector has been carried out and the need for focus in the sector has been highlighted by Tyrell David in his research report. Tyrell used a structured questionnaire and face to face interviews to collect data. Ndengwa M. examined the distribution of agrochemicals generally with a bias towards retailing in the small scale sector. The main method of data collection was a questionnaire with both open and closed ended questions. Ndengwa M. used survey method in order to explore the attitude of the respondents towards agrochemical companies.
CHAPTER THREE

3.0 Research Methodology

3.1 Introduction

The major details and highlights relating to the actual processes involved in gathering data for the results and findings are dealt with in this chapter. The descriptive research methodology and other issues relating to the research design are outlined. The issues on population and sample size as well as sampling procedures and other research procedures are clearly stipulated. The chapter also addresses data collection and data analysis methods in order to facilitate a clear understanding of the various steps involved during the research process.

3.2 Research design

A descriptive research methodology was used to gather data on the current distribution channel at the end-user level i.e. the flower farms. A survey was carried out on the sampled population by questionnaires. The target personnel in the sampled flower farms were the farm managers or the decision-makers. The questionnaires were sent out and where possible hand delivered and administered face to face in order to make any clarifications. The questions were mainly close-ended with a few that were open-ended. Structured in depth interviews were later conducted in order to ascertain data validity and obtain extra data.

Data analysis was carried out both quantitatively and qualitatively. This is because the research methodology facilitated identification of the market distribution characteristics.

The qualitative data was used to determine customers buying practices and motives.
3.3 Population and sample

3.3.1 The Population

The sampling captured the managers of flower farms in the following area of Kenya.

a) Nairobi area defined as farms in Thika, Kiambu, Limuru, Nairobi and Athi River.

b) Naivasha area – farms around Lake Naivasha and its environs.

c) Nakuru Area: flower farms in the outskirts of Nakuru town.

d) Eldoret area: flower farms in the outskirts of Eldoret town.

A list of the flower farms in the defined area was obtained from the Bayer Crop Science databank and was used for sampling. The areas chosen grow flowers on a medium to large scale in Kenya. The two main distributors in the flower sector Amiran and Elgon were also interviewed.

3.3.2 Sample Size and Sampling Procedures

A sample of 25 flower farm managers obtained from the list of operational flower farms in the B.C.S databank. This comprehensive list has been derived over a period of time from various sources and from the field personnel of B.C.S. The two main distributors Amiran and Elgon Chemicals, who dominate the flower sector business, were sampled. The third distributor, Hygrotech East Africa was left out as it plays an insignificant role in the flower sector. Random sampling was used as proposed to obtain the sample from the sampling frame in the case of flower farms. A table of random numbers was used.
3.4 Data collection methods

A structured questionnaire used to gather data from the target sample outlining issues relevant to the study such as characteristics of the current distribution channel and the customers purchasing behaviour.

Interviewing process was by both face to face interviews as well as self-administered for those sent by mail.

Appointments for interviewees were booked and scheduled by telephone.

3.5 Research Procedures

The two questionnaires prepared were pre-tested using a flower farm manager and a distributor. This was after booking an appointment with the target farm and distributor by way of telephone and a forty five minute schedule agreed upon. Some minor corrections and adjustments were then done on the initial questionnaire to cater for clarity and understanding of the questions.

Sixteen questionnaires were then mailed, but with a prior telephone call to brief the relevant flower farm while nine to be done face to face were scheduled and one hour interview time agreed upon in order to allow for further discussions and to gather other relevant information. The two distributors’ face to face interviews were also scheduled with a forty five minutes agreed period.

The questionnaires mailed out as agreed were collected from the farms with a prior telephone call to confirm. This was done to save time and ensure all collected by certain time period and where possible to counter check that all questions had been well understood and responded.
3.6 Data analysis methods

Data analysis

The data collected was both quantitative and qualitative. The quantitative data was extracted from the closed-ended questions while the qualitative data was an extrapolation from the open-ended questions. The data was on the current market distribution characteristics and the trend the customers buying behaviour and preferences as obtained from the end users.

Multiple regressions were used for analysis of confounding variables to better evaluate the contribution of other variables for example when considering the factors that determine the choice of the agrochemicals supplier (SPSS was used to develop the model).

Conjoint analysis for input from non-metric independent variables was used to analyse the data on the purchase decisions of the farm, in order to understand the importance of each attribute to the purchase decision. Each attribute i.e. the factor then had a value after the analysis. Discriminant analysis was also used to analyse the attitude of the customers towards the distributors. Purchase frequency, the order cycle, amongst others were analysed by SPSS and Excel.

Presentation

Frequency tables, pie-charts and bar charts were used to present the research results.
Summary

A descriptive research methodology was used to gather data on current distribution in the flower agrochemical sector from a random sample for survey purposes gotten from a list created by BCS on flower farms in Kenya. Twenty five medium to large scale flower farms out of the total population were sampled. The interviewing process was by both face to face as well as self administered for questionnaires sent by mail to the respondents. The main flower distributors were also interviewed to get more information relating to distribution in the flower sector. Data analysis was both quantitative and qualitative and done using SPSS and Excel. The results were presented using frequency tables, pie charts and bar charts.
CHAPTER FOUR

Results and findings

The study carried out to analyse the distribution of agrochemicals in the floriculture sector revealed findings presented below and brief comments on each aspect are provided to give a better understanding.

From the data collected and analysed it is clear that the main flower farms have been in existence for over 3 years and most of them would be termed as medium to large scale as per the 4 hectare base as the lower limit for medium sized farms. This meets the standards of the study set out to mainly look at the medium to large scale farms which would be of concern for agrochemical companies.

The flower farms are currently almost all supplied by distributors Amiran (61%) and Elgon (72%) or both hence the percentage total exceeding 100. Despite the percentage of those supplied by Amiran being less than those supplied by Elgon 44.4% of the customers prefer Amiran while 38.9% prefer Elgon.

Table 1: Allocation of flower farm managers in agrochemical purchasing decisions

<table>
<thead>
<tr>
<th>Purchasing decisions managers</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production/tech manager</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>General/farm manager</td>
<td>15</td>
<td>63</td>
</tr>
<tr>
<td>Proprietor</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Purchasing manager</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
From the pie chart and table above it shows that 62% of the flower farms General Managers are the ones who make the purchasing decisions with 17% of the proprietors and production/technical managers making the purchasing decisions.

Table 2: Allocation of flower managers in choice of agrochemicals decisions

<table>
<thead>
<tr>
<th>Choice decisions manager</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietor</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Purchasing Manager</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>General/Farm manager</td>
<td>13</td>
<td>54</td>
</tr>
<tr>
<td>Production/Technical manager</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
The data in table 2 and figure 2 shows that 54% of Farm/General managers and 38% of Production/Technical managers made the decision on actual choice of the products to be used on the farms.

Table 3: After sales services offered to farms by distributors

<table>
<thead>
<tr>
<th>After sales services</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>15</td>
<td>63</td>
</tr>
<tr>
<td>Technical advice</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Combination of services</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
62% of the farms indicated that the distributors offer no after sales services as shown in table 3 while 17% offer technical advice and a combination of services respectively.

Figure 3

DELIVERY OF AGROCHEMICALS TO THE FARMS

The pie chart (figure 3) above shows that 75% of the farms have chemicals delivered and 25% collect their supplies.

Table 4: Other products supplied by distributors in addition to agrochemicals

<table>
<thead>
<tr>
<th>Other products</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Greenhouse Construction materials</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Fertilizers and related products</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Combination of fertilizers and materials</td>
<td>17</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
71% of the flower farms indicated that the distributors who basically control the distribution business in the flower sector supply other requirements to the farms that include greenhouse construction materials, fertilizers, packaging materials and other farm requirements as shown in Figure 4 and Table 4 above.
Chart 6 and table 5 above show that 75% of the farms purchase their chemicals on pure credit while the remaining 25% are on both credit and cash. 50% of the farms are offered 60 days credit and 38% are on 90 days credit as shown on table 5 and chart 6 below.

**Table 5: Credit periods in days offered to flowers farms by distributors**

<table>
<thead>
<tr>
<th>Credit period</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 days</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>60 days</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>90 days</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>More than 90 days</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

**Figure 6**

*CREDIT PERIOD FOR FARMS*

- 30 days: 8%
- 60 days: 4%
- 90 days: 38%
- More than 90 days: 50%
Table 6: Main weaknesses of distributors identified by flower farm managers

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Delivery</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Stock out</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Substitution</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Lack of after sales service</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

Lack of after sales services and substitution of products were ranked at 33% and 25% respectively as the main weaknesses of the distributors. 8% of the farms indicated pricing as the weakness of the distributor. (See figure 7 and table 6 above).

Table 7: Main weaknesses of distributors identified by flower farm managers

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>Credit</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Range of products</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Combination</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 7 and figure 8 show reliability (38%) and the range of products (33%) as the main strengths of the distributors.
Table 8: Reasons for switch from distributors by flower farms

<table>
<thead>
<tr>
<th>Reason for switch</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product availability</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>Pricing</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Credit terms</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>To avoid cartel</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Combination</td>
<td>9</td>
<td>39%</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 10: Reasons for switch from preferred distributor

83% of the farms switch from the main distributors occasionally in order to monitor the prices offered as well as in cases where there is shortage of specific products from one of the distributors. 100% of the distributors (Amiran and Elgon) to the flower farms all over the country are located in Nairobi and the study shows that the location of the distributor has no influence on choice of the distributor for the chemicals to the farm. However it would be worth noting that one of the farms brought out the distance to Nairobi as a factor that could influence the choice of the distributor.
Table 9: Frequency of ordering by flower farms from distributors

<table>
<thead>
<tr>
<th>Order Frequency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>10</td>
<td>42</td>
</tr>
<tr>
<td>Fortnightly</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Monthly</td>
<td>11</td>
<td>46</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 9 and figure 11 indicate that 46% of the farms order products monthly while 42% order weekly. The timeliness of delivery as shown on table 10 below is on time (92%) while 8% is early owing to ordering to maintain the required stock levels and not based on actual demand for immediate use.
Table 10: Timeliness of agrochemicals delivery to flower farms by distributors

<table>
<thead>
<tr>
<th>Time</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time</td>
<td>22</td>
<td>92</td>
</tr>
<tr>
<td>Early</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 11: Preference of flower farms sourcing from manufacturers directly

<table>
<thead>
<tr>
<th>Direct sourcing</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>92</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

92% of the flower farms (figure 11) would prefer to source agrochemicals from the manufacturers or their principals for the reasons of getting technical support, guaranteed quality and price as shown in table 12 and figure 12 below.

Table 12: Benefits anticipated by flower farms sourcing direct

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical support</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Quality guarantee</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Price</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Combination</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 13: Comments from flower farms on distribution of agrochemicals

<table>
<thead>
<tr>
<th>General comments</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence of distributor</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Training and technical support</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Price control</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Combination</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

17% of the farms as shown in figure 15 generally felt that training and technical support were of importance to distribution of agrochemicals in addition to their competence with an element of price control.

Table 14: Ranking of factors considered by flower farms in decision making

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>PRICE</th>
<th>PRODUCT RANGE</th>
<th>PRODUCT AVAILABILITY</th>
<th>CREDIT</th>
<th>SERVICE</th>
<th>DISCOUNT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANK OF FACTOR</td>
<td>2.625</td>
<td>3.33</td>
<td>3.975</td>
<td>3.5</td>
<td>4.875</td>
<td>5.083</td>
<td>5.91</td>
</tr>
</tbody>
</table>
The ranking of factors that are considered pivotal in decision making regarding distribution indicates price at 2.625 (against a scale of 1 to 10 with 1 being the most important) at the top while the proximity to the source at 5.91 ranks lowest. The other factors that were considered showed that product range and product availability are critical and come a close second and third to price respectively as shown on table 15. Credit and customer service in relation to after sales and technical support are next on the ranking. Discount offered is on average considered to be only second to proximity of source in terms of ranking from the rear.

Table 15: Weighting of factors considered for decision making

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>PRICE</th>
<th>PRODUCT RANGE</th>
<th>PRODUCT AVAILABILITY</th>
<th>CREDIT</th>
<th>CUSTOMER SERVICE</th>
<th>DISCOUNT</th>
<th>PROXIMITY TO SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEIGHT OF FACTOR</td>
<td>8.58</td>
<td>8.75</td>
<td>8.625</td>
<td>7.95</td>
<td>6.041</td>
<td>5.7</td>
<td>3.375</td>
</tr>
</tbody>
</table>

Figure 13: Weighting of factors by flower farm managers
The ranking was considered as inadequate as a stand alone and hence a weighting of the factors discussed above was also analysed. The weighting showed that though price was the one ranked top when considering the purchase of products it came third after product range availability and the actual availability at the time of ordering. Product range, availability and price are very important as per the weighting on table 15 and figure 13 above. Credit terms period is also a critical factor based on weight as well as per the ranking since it falls fourth in both situations. Customer service, discounts and proximity to source are less significant.

Distributors’ responses

The 2 main distributors in the flower sector have the decisions on procurement of agrochemicals done by the General Manager for Amiran and the Managing Director in the case of Elgon Chemicals. The distribution of the annual business of the two distributors is as shown in the pie chart 14 and 15 below;

![Pie Chart](image-url)
Elgon has exclusive business with BASF on their flower sector agrochemicals though they are not the registrants of the products locally while Amiran has exclusivity on MAK products as well as being the local registrants of the trade names. None of the distributors is offered any technical support or training directly by the various suppliers. However Amiran offers technical support and training to the flower farms but Elgon does not offer any support.

Amiran and Elgon Chemicals supply chemicals to flower farms on 60 days credit. Elgon indicated that suppliers delivered stocks on time while Amiran indicated late deliveries and both stated that occasionally stock outs were experienced. The main weaknesses of BCS in relation to the distributors Amiran and Elgon are low margins on products due to the fact that BCS gives a price at the farm level thus also seen as interfering with the prices at the farm level. The main strengths of BCS are indicated as the wide range of products for pests and disease control in the flower sector.
Table 16: Ranking of factors considered for decision making (for farms) by distributors.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>PRICE</th>
<th>PRODUCT RANGE</th>
<th>PRODUCT AVAILABILITY</th>
<th>CREDIT</th>
<th>SERVICE</th>
<th>DISCOUNT</th>
<th>PROXIMITY TO SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANK OF FACTOR</td>
<td>1.5</td>
<td>1.5</td>
<td>4</td>
<td>3</td>
<td>5.5</td>
<td>5.5</td>
<td>7</td>
</tr>
</tbody>
</table>

The distributors Amiran and Elgon ranked Prices and product range availability as the most important and proximity to source as least important for flower farms when considering choice of distributors as seen in the table 16 above.

Table 17: Weighting of factors considered for decision making (for farms) by distributors

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>PRICE</th>
<th>PRODUCT RANGE</th>
<th>PRODUCT AVAILABILITY</th>
<th>CREDIT</th>
<th>CUSTOMER SERVICE</th>
<th>DISCOUNT</th>
<th>PROXIMITY TO SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEIGHT OF FACTOR</td>
<td>9.5</td>
<td>10</td>
<td>7.5</td>
<td>7.5</td>
<td>7</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
In terms of the weight of the factors, price and product range availability had the highest weight while proximity to source and discounts were lowest in weight as seen in the table 17 and figure 16 above.

Summary

The results indicate that the choice of chemicals and decision on purchasing are made by General/Farm managers, 63% and Technical/Production managers, 17%. Supply to the flower farms is 100% through the distributors Amiran and Elgon Chemicals with preference of Amiran by flower farm managers. Distributors offer minimal (37%) after sales service which is seen as the main benefit to be gained by direct purchase from suppliers. The bulk of flower farms would want to get products from the manufacturers or their principals from whom the farms hope to also benefit through guaranteed quality products and better overall prices.
However, the major findings revealed that the main aspects considered by flower farm managers when making decisions on choice of distributors product range availability, actual product availability and price are uppermost while customer service, credit, discounts and proximity to source are less significant in that order. The major strengths of the distributors are the product range availability, reliability and credit period offered while their weaknesses are lack of after sales services, 33% (technical support and training) and substitution of products, 25%.

Low operating margins owing to influence of prices at flower farms level was indicated as the main weakness of BCS by distributors while the wide range of agrochemicals for use in the flower sector indicated as the main strength of BCS. Lack of technical support and training at distributor level for their personnel came out as an important aspect in the general comments of the two distributors. The need to discuss and agree on the prices to be offered to flower farms by the distributor in conjunction with the suppliers also cited as critical to the success of the distribution channel.
CHAPTER FIVE

Discussions, Conclusions and Recommendations.

Introduction
The chapter looks at the main issues on the basis of results and findings of the study. It looks at distribution of agrochemical aspects in the flower sector and their influence in designing an effective and sustainable strategy. Conclusions derived from the discussion of the results are also included and are used to determine the way forward for the agrochemical sector in the flower sector. From the conclusions, recommendations on the future of the distribution in the flower sector are made including aspects that need to be looked into in relation to the general distribution of agrochemicals in the sector and other segments.

Summary
The purpose of the research was to identify the strengths and weaknesses of distribution of agrochemicals in the flower sector in reference to Bayer Crop Science (BCS). From the study the effectiveness of the current distribution channels of BCS in the flower sector was addressed and information gathered to facilitate identification of a suitable distribution channel that meets the demands of the flower farms. Data was collected through structured questionnaires and personal interviews. Secondary data was also collected from various sources. Flower farms’ preferences and purchasing behaviour regarding the current distribution trend are also identified and analysed.
Discussion

Based on the results and findings of the study the objective of identifying the current agrochemical distribution channels in the floriculture sector is addressed. The current distribution channel entails the use of physical distributors who basically act as a conduit for products from the manufacturers or their local principals. The distributors act as a one stop shop for the requirements of agrochemicals for flower farms. Amiran Kenya limited and Elgon Chemicals (Prestige Packaging) dominate the supply of agrochemical products in the sector. The two companies supply agrochemicals to all the flower farms, but generally there is a preference for Amiran owing to a wider range of other farm requirements including generic products.

This form of distribution maybe termed as selective distribution as categorized by Lancaster and Massingham in 1998. This distribution channel entails the manufacturer supplying the customer through a few intermediaries (Amiran, Elgon and Hygrotech). Manufacturers or their principals’ then utilize the pull strategy as outlined by Egan and Thomas in the CIM handbook of strategic marketing (1998). The manufacturers or their principals’ emphasize technical support and training on pests and disease management. Thus marketing by the manufacturers or their local principals is at the farm level.

The strengths of the two distributors are their product range availability, and the ability to offer credit periods of between 60-90days. Product availability as discussed by Lalonde and Zinster, 1975, is dominant in the minds of consumers and this is confirmed by the fact that it is a major strength and also ranked and weighted highly as shown in table 14 and figure 13. Kotler also underscores the importance of availability, accessibility and cost effectiveness in distribution management. According to the flower farms the main
weaknesses among distributors are after sales services, substitution and delivery as shown in figure 7 and table 5 respectively.

The current distribution channel involving use of intermediaries Amiran and Elgon has benefits in that it facilitates physical distribution of products which is critical as pointed out by Hass R.W and also in a study by Agwata on SmithKline Beecham. The distributors deliver the products to the flower farms in most cases timely thus ensuring the order time is addressed. Relatively long credit periods are offered taking the burden of handling many accounts away from the principals.

The study identifies the customer preferences and purchasing behaviour in the current distribution where intermediaries are used. The preferences indicate that the farms prefer to have a one stop shop where they can purchase all their requirements with one account to settle. The ordering preference of the farms stands at 46% monthly and 42% weekly. This allows the distributors to order the requirements for the farms without having to hold stock. Credit and reliability of the distributor is important to the flower farms.

After sales service in terms of technical support / training (product use and management of pests and diseases) are critical to the flower farms. Based on the timeliness of delivery and minimal incidences of stock outs it is evident that the farms need prompt and accurate delivery. This is further stipulated by the negative comments on some incidences of substitution of ordered products with those preferred by the distributor leading to mistrust. Flower farms occasionally switch from one distributor to another in order to monitor prices and satisfy their needs. The respondents have also indicated that they
would prefer to purchase directly from the manufacturers or principals in order to enjoy technical support, training, quality products and competitive prices.

An effective distribution channel for BCS would involve a hybrid strategy of direct access of products from manufacturers or their principals for selected farms and several distributors to allow farms access wide product range. The aspect of delivery and long credit periods are critical and should be taken into consideration. Small orders due to products running out earlier than anticipated or following unexpected weather conditions that lead to need for urgent sprays will be addressed by accessing the distributors.

Conclusions

Current distribution system

According to 63% of the sample the existing floriculture sector distribution system adds little or no value to agrochemical products. The manufacturers or their principals apply pull strategy and offer technical back up while the distributors undertake product delivery and offer credit facilities. Fifty percent of the farms enjoy 60 days credit and 38% get 90 days credit. The main distributors, Amiran and Elgon Chemicals control 100% of flower business. Apart from supplying agrochemicals, they provide fertilizers, packaging materials, greenhouse construction materials and farm equipment. The distributors therefore act as one-stop-shops for the flower sector.

Distributor selection determinants by flower farms

The major determinants of distributor selection are product range, product availability and price. The farm managers weighted these variables between 8 and 9 on a scale of 1-
10 where 10 is the most important and 1 the least important (see figure 13). Credit and delivery are also significant and hence any new strategies to be adopted by the manufacturers such as BCS must be prepared to contend with offering unsecured credit, competitive prices with 29% of farms anticipating reductions in price with direct purchase. Delivery to many farms spotted all over the country will be necessary since currently 75% of farms have their products delivered.

Flower farms have indicated that today’s market calls for value adding distribution and hence the distributors need to get technical personnel on the ground if they have to remain competitive. This is a strength among manufacturers who understand the problems of the farmers at technical level particularly pest and disease management. An understanding of farm needs is important for a company that is considering a change in distribution policy.

The current distributors are weak on after sales service. Sixty three percent (63%) of farms indicated that distributors do not offer after sales service in terms of technical support. They tend to use dubious means such as substitution of products ordered without informing the farms or charge higher prices on manufacturers’ products against those that they want to push in order to realize better margins. Amiran and Elgon have products that they sell exclusively from Makhteshim Agan and BASF respectively. The two intermediaries serve as competitors and distributors.

**Distribution strategy for the flower sector**

Based on the discussion derived from the results and findings it is clear that a hybrid of selective distribution and direct sales should be adapted. Ninety two percent (92%) of
farms indicated that they would prefer direct business with BCS. This is likely to enhance the market grip for Bayer Crop Science and lead to increased turnover. It will also curtail product substitution. Twenty five percent (25%) of farms indicated that substitution is a major as a major weakness among the distributors.

The distributors in the sector need to be increased from two and all the players given a level playing field in terms of credit terms. Seventy five percent (75%) of farms indicated that they buy products on credit. A few farms selected direct sales but with the leeway to purchase from the distributors. The number should be based on the value of business, terms of payment and aimed at controlling at least 40% of the total BCS business in the flower sector based on an in house analysis of the total flower business which is controlled by only 10 flower farms (Floriculture sector analysis and strategy, BCS, 2003).

**Recommendations**

**Hybrid Distribution Policy**

Bayer Crop science should adopt a hybrid distribution strategy that entails use of selective distribution with provision of a bank guarantee and direct sales to a selected number of farms that will total business value above 40% of the total BCS flower business.

The choice of additional distributors for the Bayer Crop Science flower sector should take into consideration the distributors product range availability based on the fact that the flower farms weight it between 8 and 9 on a scale of 1-10 where 10 is the most important and 1 the least important. To facilitate direct sales to farms, BCS should analyse potential farms in terms of business value, size and financial capabilities.
Pricing

From the discussion and conclusions the price of agrochemicals was strongly weighted by flower farms. An evaluation of the pricing structure relative to generics should therefore be undertaken as the market is price sensitive. BCS should occasionally advise flower farms on appropriate prices in order to reduce or eliminate overcharging by the distributors. The results indicated that 29% of farms anticipated a price benefit on direct purchase and weighted price between 8 and 9 on a scale of 1-10 with 10 the most important. See table 13.

After sales service

Bayer CropScience should capitalise on its strength of technical knowledge and offer support and training to farms and to the distributors. It should also give information on pests and disease management in relation to BCS products. Sixty three percent (63%) of farms indicated that distributors do not offer after sales services.

Cost benefit analysis

A comprehensive analysis of costs involved in the whole chain of the distribution from the manufacturer to the consumer and the financial implications of the various distribution options should be undertaken. This should also involve a study on the benefits and limitations of the various distribution options. Relevant aspects include exclusivity, outsourcing, and level playing field for all intermediaries.
Further research

A study on the effectiveness of a particular distribution strategy at intermediary and farm level should be conducted. This should include various motivators that can improve productivity.
Budget

- Implementation Schedule

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>WEEKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Proposal and preliminary approvals</td>
<td>X</td>
</tr>
<tr>
<td>Preparations, questionnaires, re-test</td>
<td>X</td>
</tr>
<tr>
<td>and final development</td>
<td></td>
</tr>
<tr>
<td>Protocol development and appointments</td>
<td></td>
</tr>
<tr>
<td>Field work (interviews)</td>
<td></td>
</tr>
<tr>
<td>Questionnaire sorting and coding</td>
<td></td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
</tr>
<tr>
<td>Draft reports</td>
<td></td>
</tr>
<tr>
<td>Final report and dissemination</td>
<td></td>
</tr>
<tr>
<td>Item / Activity</td>
<td>KShs</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Pre- research activities and proposal</td>
<td>6,000</td>
</tr>
<tr>
<td>Questionnaire development and pretesting</td>
<td>5,000</td>
</tr>
<tr>
<td>Communication costs</td>
<td>5,000</td>
</tr>
<tr>
<td>Interview costs</td>
<td>10,000</td>
</tr>
<tr>
<td>Travel costs (car – hire) and night outs</td>
<td>58,000</td>
</tr>
<tr>
<td>Supplies / equipment</td>
<td>4,000</td>
</tr>
<tr>
<td>Data entry and analysis</td>
<td>9,000</td>
</tr>
<tr>
<td>Report preparation and compilation</td>
<td>10,000</td>
</tr>
<tr>
<td>Sub-total</td>
<td>107,000</td>
</tr>
<tr>
<td>10% contingency costs</td>
<td>10,700</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>117,700</strong></td>
</tr>
</tbody>
</table>
REFERENCES

- Bayer CropScience, Marketing 2004; Floriculture sector analysis and strategy.
- Bayer East Africa data bank 2003, Marketing department.
- Ndegwa, M. 2002; Factors to consider in improving the key dealer distribution system of agrochemicals in Kenya.
• Palmer Adrian and Hartley B. 1999; the Business and Marketing Environment; 3rd Ed, McGraw Hill.
• Patsula Media, 2001; The Entrepreneur’s Guidebook series.
• Stanton W. J 1987. Fundamentals of Marketing, Grolier
• Tyrell D. 2003; A General overview of the Kenyan Agrochemical Industry
Appendix I

UNITED STATES INTERNATIONAL UNIVERSITY- AFRICA,
SCHOOL OF BUSINESS,
P. O BOX 14634,
NAIROBI,
3rd December 2003,

TO:

Dear Sir / Madam,

RE: RESEARCH ON THE EFFECTIVENESS OF FLORICULTURE AGROCHEMICAL DISTRIBUTION IN KENYA,

I am an MBA degree student at USIU-Africa undertaking the above research as part of my course requirement.

In reference to a list of flower growers / distributors in Kenya, I have the pleasure to inform you that you have been randomly selected to participate in the above research. Please take a bit of your time and complete the enclosed questionnaire by putting a tick in the appropriate box and completing the blank spaces.

The information you provide is for academic purposes and will be treated in confidence. This information will facilitate improvement of agrochemical distribution for the floriculture sector in Kenya.

Thank you in advance for participating in this academic effort.

Kind regards,

Kithinji Anampiu
MBA Student
Appendix II

FLOWER FARMS QUESTIONNAIRE

Instructions: Please tick the appropriate box and complete the blank spaces

1. a) Name of Flower Farm ________________________________
   b) Name of the respondent (optional) ________________________________
   c) Designation ________________________________

2. Size of the flower farm in hectares ________________________________

3. How long has the firm been in operation?
   Less than 3 years □
   3 – 6 years □
   7 – 10 years □
   Over 10 years □

4. Who makes agrochemical purchasing decisions for your flower farm?
   The Proprietor □
   The Farm Manager □
   The Production/ Technical Manager □
   The Purchasing Manager □
   Other (Specify) ________________________________

Please tick the appropriate box and complete the blank spaces.
5. Who makes the choice of agrochemicals to be purchased for your farm?
   The Proprietor □
   The Purchasing Manager □
   The Farm Manager (General Manager) □
   The Production / Technical Manager □
   A consultant □
   Other (specify) ____________________________

6. Who is the major supplier of agrochemicals to your farm?
   Amiran □
   Elgon chemicals □
   Syngenta □
   Bayer □
   Others (please specify) ____________________________

7. What is the value in Kenya shillings of your farm’s agrochemical consumption per annum?
   Below 1 million □
   1 – 5 million □
   6 –10 million □
   11 – 20 million □
   Above 20 million □

8. Please indicate your preferred supplier ____________________________

9. Do you call the specified distributor to place your orders?
   Yes □
   No □
10. What after sales services do you get from your preferred suppliers?
   - Technical advice on pest and disease management  
   - Training on relevant issues relating to the farm  
   - Others please specify  
   - A combination of services  
   - None

11. Does the preferred distributor influence your choice of agrochemicals used on the farm?
   - Yes  
   - No

12. If yes above please indicate what kind of influence

13. What is the location of your preferred distributor?
   - Nairobi  
   - Naivasha  
   - Nakuru  
   - Other (Specify)

14. Does the location influence the choice of your preferred distributor?
   - Yes  
   - No

15. Does the preferred distributor deliver the agrochemicals to the farm?
   - Yes  
   - No
16. Please state other products supplied by your preferred supply to the farm alongside agrochemicals

- Greenhouse construction materials
- Fertilizers and other related products
- Packaging materials
- Others (specify)
- None

17. How do you pay for your agrochemicals?

- Cash
- Credit
- Cash and credit
- Others please specify

18. If you purchase on credit, please indicate the credit period?

- 30 days
- 60 days
- 90 days
- More than 90 days

19. How would you categorize the prices of agrochemicals offered by your main supplier?

- Very high
- High
- Fair
- Low
20. What would you say are the main weaknesses of your preferred supplier?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

21. What suggestions would you propose that would significantly reduce the weaknesses in 20 above?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

22. What would you say are the main strengths of your preferred distributor?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

23. Rank the following factors in order of importance when choosing your preferred distributor where 1 is the most important and 7 the least.

Price □ Discounts □ Credit terms □ Customer service □

Product availability □ Product range availability □ Proximity to source □

24. Indicate a weight to the factors ranked above with 10 being the highest and 0 the lowest.

Price □ Discounts □ Credit terms □ Customer service □ Product availability □

Product range availability □ Proximity to source □

64
25. Do you occasionally switch from your regular/main supplier of agrochemicals?

Yes  □

No   □

26. Indicate the reasons for your response in 25 above.

__________________________________________________________________________________

__________________________________________________________________________________

27. How often do you place your orders to the preferred supplier?

Once a week  □

Once fortnightly □

Once a month  □

Others (specify) ____________________________________________________________

28. What is your comment on the timeliness/speed of delivery by your supplier?

On time  □

Early  □

Late  □

29. Do you experience any stock outs with your preferred supplier?

Yes  □

No  □

30. If 29 above is yes please indicate the reasons for the stock outs.

__________________________________________________________________________________

__________________________________________________________________________________
31. Would you prefer getting your supplies of agrochemicals direct from the manufacturers?
   Yes □
   No □

32. If 31 above is yes, what main benefit do you anticipate to get from the arrangement?


33. Please give any other comments that you may deem relevant to the study if any.


THANK YOU
Appendix III

DISTRIBUTOR QUESTIONNAIRE

Instructions: Please tick the appropriate boxes and complete the blank spaces

1. a) Name of Distributor: ----------------------------------------------
   
b) Name of the respondent (optional) and Designation: -------------------

2. Who makes the agrochemicals procurement decisions for the company?
   - The Proprietor: □
   - The Managing Director / General Manager: □
   - The Purchasing manager/officer: □
   - Other (specify): ------------------------------------------------------

3. What is your total annual agrochemical turnover in Kenya shillings?
   - Below 100 million: □
   - 101 – 500 million: □
   - 501 – 1 billion: □
   - Over 1 billion: □

4. Please indicate the value in Kenya shillings and/or as a percent of your agrochemical purchases from the following distributors.
   - Syngenta: -------------------------------------------------------------
   - BASF: -----------------------------------------------------------------
   - BCS: -----------------------------------------------------------------
   - MAK: -----------------------------------------------------------------
   - Others (specify): ------------------------------------------------------
5. Indicate suppliers that have exclusive business with you
   Yes □
   No □

6. Are you the local registrant of the above products that you have exclusivity for?
   Yes □
   No □

7. What after sales services do you enjoy from your suppliers?
   None □
   Technical/Marketing advice on their products □
   Training on aspects relating to agrochemicals for your personnel □
   Other (specify) ..........................................................................................

8. What after sales services do you offer to flower farms?
   None □
   Technical advice on pest and disease management □
   Training on aspects relating to agrochemicals □
   Other (specify) ..........................................................................................

9. What are the trading terms with the flower farms?
   Cash □
   Credit □
   Cash and credit □
   Others (specify) □
10. If you offer credit, please indicate the credit period?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30 days</td>
<td></td>
</tr>
<tr>
<td>60 days</td>
<td></td>
</tr>
<tr>
<td>90 days</td>
<td></td>
</tr>
<tr>
<td>More than 90 days</td>
<td></td>
</tr>
</tbody>
</table>

11. What margins on average do you load on to your products to the flower farms?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 5%</td>
<td></td>
</tr>
<tr>
<td>6-10%</td>
<td></td>
</tr>
<tr>
<td>11-15%</td>
<td></td>
</tr>
<tr>
<td>16-20%</td>
<td></td>
</tr>
<tr>
<td>Over 20%</td>
<td></td>
</tr>
</tbody>
</table>

12. Rank the following factors in order of importance based on your experience that farms consider when choosing a distributor (1 as the most important and 7 the least)

<table>
<thead>
<tr>
<th>Factor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>Discounts</td>
<td></td>
</tr>
<tr>
<td>Credit terms</td>
<td></td>
</tr>
<tr>
<td>Customer service</td>
<td></td>
</tr>
<tr>
<td>Product availability</td>
<td></td>
</tr>
<tr>
<td>Product range availability</td>
<td></td>
</tr>
<tr>
<td>Proximity to source</td>
<td></td>
</tr>
</tbody>
</table>

13. Indicate a weight to the factors ranked above with 10 being the highest and 0 the lowest weight.

<table>
<thead>
<tr>
<th>Factor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>Discounts</td>
<td></td>
</tr>
<tr>
<td>Credit terms</td>
<td></td>
</tr>
<tr>
<td>Customer service</td>
<td></td>
</tr>
<tr>
<td>Product availability</td>
<td></td>
</tr>
<tr>
<td>Product range availability</td>
<td></td>
</tr>
<tr>
<td>Proximity to source</td>
<td></td>
</tr>
</tbody>
</table>
14. What is your comment on Bayer Crop Science (BCS) delivery?
   On time □
   Early □
   Late □

15. Do you experience any stock outs with BCS?
   Yes □
   No □

16. If 15 above is yes please indicate the possible reasons.

17. What are the major weaknesses of BCS as one of your suppliers of agrochemicals as compared to others?

18. What are the possible remedies for the weaknesses stated in 16 above?

19. What are the strengths of BCS as a supplier of agrochemicals in the floriculture sector?
20. Please give any other comments that you may deem relevant to the study.


THANK YOU.