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## **FARMCHEM'S DILEMMA: Coping with Distribution Challenges in the Supply Chain Management**

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### **Introduction**

It was on Monday, the 3rd of April, 2011, when Mr. Charles Mulinge, the Managing Director (MD) of Farmchem Limited, a firm dealing in agricultural input products, received a phone call. "Hallo!" he answered the phone. The caller went on but a look at the MD's face was not amusing. After about five minutes, he banged the receiver back. "What is it with these middlemen?" he mumbled to himself. The caller was a field officer covering Mount Kenya Region. "Sir is there something wrong?" his secretary enquired. "That was Mount Kenya Regional Manager reporting again that the distributors in his region are not delivering orders to the farmers on time and are overcharging by a mark up of 10%, making our products more expensive and therefore not moving". After a long pause, he asked the secretary to invite the operations, finance and sales & marketing managers for an immediate meeting in his office. "Gentlemen, good morning again" he greeted his management team and continued. "Today we consider and decide whether we should maintain the status quo or shorten our supply chain by selling directly to farmers". The meeting continued.

### **Company Background**

Farmchem was established in Kenya in 1978 as a family owned business by Dr. Mulinge, a plant pathologist, with the objective of selling coffee disease protective products and spraying accessories within the country. Dr. Mulinge was one of the first Kenyans to obtain a PhD in plant pathology in the late 1960's. He is reputed to have pioneered the coffee disease resistant Ruiru 11.

The company was located on Ndume Road, off Lunga Lunga Road, in Nairobi's Industrial area, Kenya. The products comprised of crop protection and spraying equipment, all of which are farmer based. The products were categorized as insecticides, fungicides, herbicides, special fertilizers and equipment. The company's value addition chain starts with importation, warehousing, branding, repackaging into small sizes and delivery to the distributors, large scale farmers and farmer cooperatives.

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The vision of Farmchem is to be the ‘leaders of innovative farming solutions’ and, according to the mission statement this was to be achieved by creating, maintaining, and strengthening relationships with the final customer - the farmer. The mission statement notes, however, that “In some cases (especially small-scale) we need to work through dealers / retailers - the one-stop shop concept may offer benefits to this sector - and strategically set up depots to increase product availability.”

From 1978-1980, the company’s markets were mainly in the coffee growing Mount Kenya Region and the business did well. However, from 1982 to 1990s, the coffee industry in Kenya went into crisis due to rapid decline of international coffee prices following the global economic recession of 1982. The situation discouraged farmers, especially smallholders’ farmers, and many uprooted coffee trees from their farms to grow alternative crops with higher returns and a ready market, such as horticultural crops. Consequently, the production of coffee in Kenya dropped from 130,000 tons in the 1990s to 50,000 tons in 2000s, resulting in a drop in the overall demand for coffee pest control products. By 1999, Farmchem was faced depressed incomes and there was an imminent threat to close down the company.

Dr. Mulinge was aging and increasingly getting fatigued. In late 1997, he recalled his son, Charles, from Kenya BP Shell Ltd to take over as the Managing Director. During the hand over meeting between the father and the son, the father said to the son: “son take this company to the farthest frontiers and create value”. The son replied, “Father, I reckon that the company has two major problems; namely the drop in the sales which I believe can be solved through an aggressive diversification process. The other problem is the distribution. I promise that I will do my very best to address both problems faced by this company”.

On taking office, Charles, decided to diversify into other product lines to cushion the company against the volatility of the coffee crop protection products. As a result the company expanded its geographical market coverage to Rift Valley and Western Regions of Kenya. The company introduced floriculture and horticulture disease curative products into the market. **Exhibit 1** shows some of the products the company dealt with.

Farmchem had grown to a permanent staff of 50 and an annual turnover averaging to kshs 540M (US\$ 6.5 million) per annum by the end of 2010. The volume sales breakdown was 70% on crop disease curative products and the rest was seed, fertilizer and equipment sales. However, the diversification created distribution challenges to Farmchem. The company’s major concern was how they could effectively and efficiently cover the expanded market for the new products. The company’s business model was importing products in bulk, break the bulk, branding and selling.

The company’s management structure was made of a three tier structure as seen in (**Exhibit 2**). The first tier comprised of functional managers who report directly to the MD. They consisted of the Sales & Marketing department, the Operations department, the Human Resources department, Quality Assurance Department and the Finance and Administration department. These departments oversaw all the activities of Farmchem. The second tier comprised of Area managers, Crop specialists, Quality assurance, and Credit managers who reported to the functional managers. The third tier comprised of Agronomists, Customer Care and Field

Officers. These officers reported to the second tier managers and obtained feedback through the same channel. The company practiced an open door policy.

### **Charles Mulinge (CEO)**

Charles Mulinge, Managing Director (MD) of Farmchem Ltd is in his early forties. He is the son to the promoter Dr. Mulinge. In his school days, he wanted to work with his father. He obtained an MBA from the University of Nottingham in the United Kingdom. After completing his MBA, he worked for Kenya BP Shell Ltd for a period of 2 years, where he gained valuable experience in marketing. Charles joined Farmchem in 1997 and his key contribution into the company was product diversification. Charles is cheerful, likable and outgoing person. He would easily fit in the description of a consultative MD.

### **Industry structure**

The crop protection products market in Kenya was dynamic with stiff competition among various players dealing in both patent and off-patent products. It had not been easy for Farmchem to operate in this market. The company had to contend with a number of challenges in the market; key among these were: inbound logistics, storage logistics and outbound logistics. In particular, Famchem had a raw deal with the distributors who had been sidelining its products through delayed delivery and price wars. Distributors are at liberty to sell various suppliers products to any customer.

As at January 2011, the combined market value of the coffee, floriculture and horticulture curative disease products and accessories was estimated at ksh 6.7 billion. Some of the renowned market players were Twiga Chemicals Ltd, Amiran Kenya Ltd, Murphy Chemicals Ltd, Sygenta and others (**Exhibit 3**).

Syngenta, Bayer and Amiran have the largest market share of 46% followed by Farmchem at 10%. Entry into the distribution chain was easy through agrovets units also called stockists . These are stores that stock farm and animal products, drugs and chemicals and other agriculture input items. The initial capital to establish a similar distribution outlet is ksh 400,000. A typical distributor charges ksh 500,000 each to stock Famchem products, being the equivalent of rent, shelf space and handling charges. This charge is based on average discounts/rebates accorded to distributors' which range between 10 to 15% of purchase value. An Agrovet store staff emoluments was estimated at ksh 51, 000 per month per store. Rental and other overheads amounted to ksh 50,000 per month. For countrywide net coverage, Famchem needed at least 50 agrovets outlets spread across the country, to replace a similar number of distributors.

In the course of business, distributors had been known to adulterate crop protection products so as to maximize profit. This unethical business practice has been checked, albeit unsatisfactorily by the Pest Control Products Board. This is the Kenyan registered regulator for all chemicals applied on animal and crops.

Besides sometimes tampering with the physical product, distributors and stockists add a markup on cost of 7% and 8%, respectively on top of the Farmchem's recommended prices. This ideally adds to the prices of the products. In the event the distributors buy from Farmchem, they would be charged ksh 509, however for them to sell; they are expected to price at ksh 544, equivalent to

7% mark up on cost. The same will apply to large estate framers and cooperatives. However when agrovets buy from the distributors, they will be charged at 544 and expected to sell at 550 which is an additional 1% over and above the 7% mark up on cost. If Farmchem sold directly to the farmers the above mark ups would not be there. One of the crop protective products is called Farmuron; 250gms was showed as an example. (Exhibit 4)

Customers of most products require fast delivery, attention and information. By reducing the middlemen, Farmchem would be in a position to provide a more personalized service to farmers, resulting in closer working relationships and faster delivery of products. New services offered would include more field demonstrations by Farmchem's field officers working closely together with the stores staff. The field demonstrations would be used as a vehicle to inform the farmers on new products in the market, the applications of the products, the timing of the application of the products, and the storage procedures.

The creation of stores country-wide would require massive investments to the tune of ksh 20 million. It was anticipated that each store could deliver an average sales of ksh 2 million per month. The company may not have the funds from its internal sources; therefore the same may be sourced from the financial institutions at the prevailing rate of interest of 20%, applied on a declining balance method, for a period of 5 years.

The proposed stores would require to be managed by at most three employees. The average monthly gross wage bill per person will be ksh 17,000. The marketing costs will be borne solely by Farmchem. Famchem's stocking arrangements to the distributors were standardized to ksh 1 million at any single time. The stock is replenished as stock diminishes.

## **Drivers of the supply networks**

### **Customer service**

The company's values are reflected in their official statement as follows: "We distinguish ourselves by way we negotiate with / receive / direct / handle our customer's calls / interactions to processing and approving their orders. We distinguish ourselves further by the way we transport / deliver the order(s) to their respective destination(s), to finally acknowledging the customer and handing over the goods signifying that we transact business offering a stress-free and efficient service. Selling directly to large-scale end-users further helps us in building relationships with them and monitoring product performance. Handling customer complaints on time have kept us a step ahead in this industry which has been hit by poor quality, fake and adulterated products."

It is noteworthy that Farmchem deal with products that can be environmentally harmful and likely to cause health hazards. Therefore great care must be applied in the bulk breaking and packaging. Indeed the disposal of the packaging materials and containers must be handled with great care in line with the standards National Environmental Management Authority (NEMA), a Kenyan agency empowered to regulate and control the environment in Kenya has developed.

The supply networks drivers for crop protection products, (Exhibit 5), detail the supply and distribution chain.

**a) Suppliers**

Farmchem sources its products from Europe, India and USA with a lead time of 60 days average. The products are imported in bulk and are broken into manageable quantities for distribution into the market through the brand name of 'Farmchem'. Farmchem obtain a discount of 30% on all the products that they import. For their part, Farmchem loads 30% mark up on cost on all sales. To induce the distributors, cooperatives and estate farms, Farmchem give a 2% commission on sales volume when one meets targeted sales.

**b) Distributors**

Farmchem uses distributors as a channel to reach various parts of the market within the country. The genuine distribution channels comprise of the merchant distributors and the farmer cooperatives. However, the large estate farmers buy for their own use. The distributors buy in bulk and sell at a profit to stockists (agro-vets) and farmers in different segments of the market. These are general distributors who deal with multiple products, including Farmchem competitor's products.

**c) Farmers' Cooperative societies**

Farmers who have organized themselves into cooperatives also buy directly from Farmchem to sell to their members at a reduced price.

**d) Large scale farmers**

Large scale farmers have the capacity to bargain for better prices due to bulk purchases. Due to this, they buy directly from Farmchem.

**e) Stockists( Agro-vets)**

They buy from distributors in relatively smaller quantities and sell directly to the end users, usually the small farmers at a profit.

**f) Farmers**

These are the ultimate users of the products on their farms. The volumes of sales are handled through the various channels are shown in **Exhibit 6**. Indeed the distributors handle 75% of the volume sales of all the products.

**Association within the supply network**

According to Charles, the relationship within the supply network is what one would call adversarial since there were no long term contractual agreements binding various parties within the network. The business dealings were short term (one off), governed by sales agreements and focused on the immediate sales deal.

**Company's supply chain dilemma**

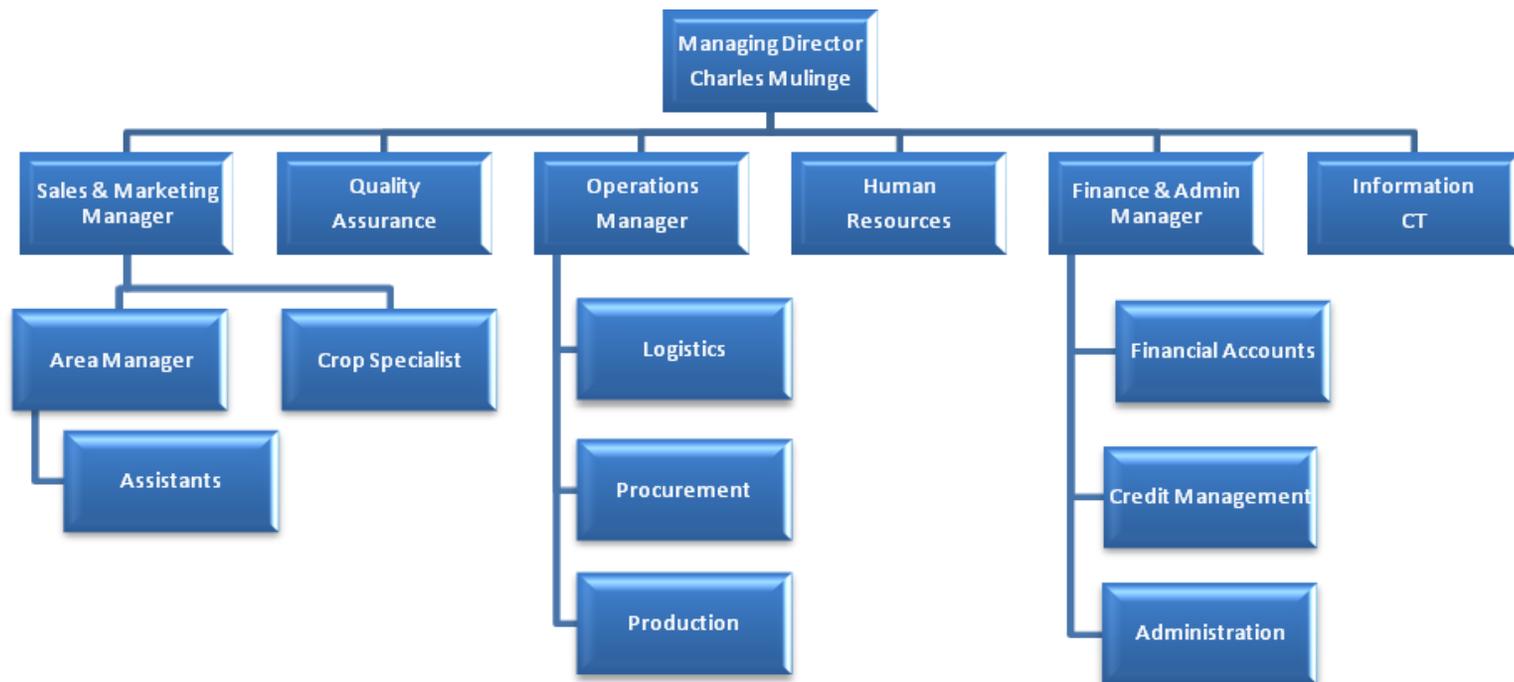
The reports from the field officers were worrying. The customers (farmers) were not getting the products on time making them prefer competitors' products. The distributors were inflating Farmchem's prices giving undue advantage to competitors. Looking at the sales graph for the last four months, Charles noted a constant dip in the figures (**Exhibit 7**). He quipped" this situation cannot be allowed to continue. Something has to be done urgently". The options were to continue with the present distribution chain or set outreach to stockists' country –wide.



Exhibit 1: Sample of Products Sold by Farmchem



**Exhibit 2: Management Structure**



### Exhibit 3: Industry Players

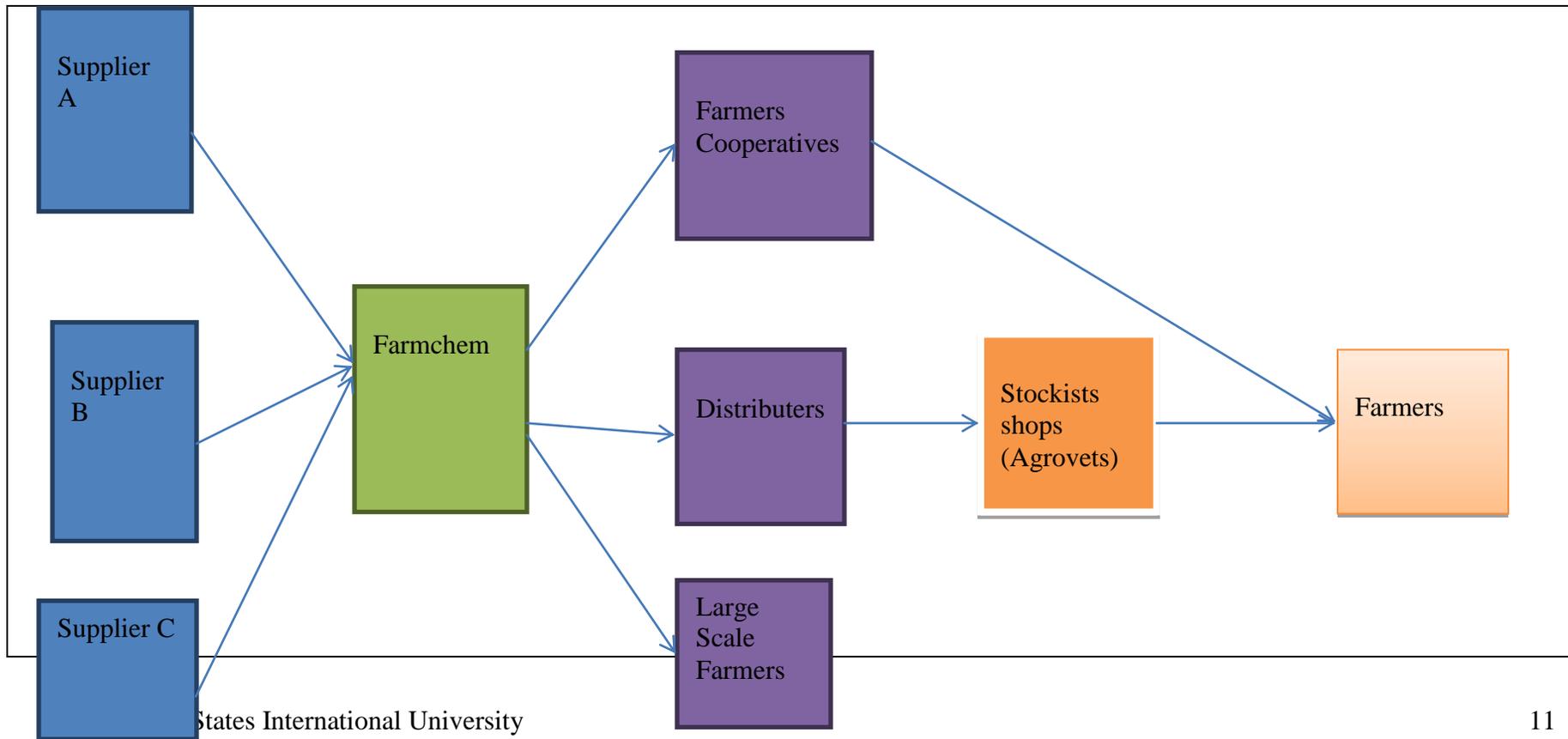
No.	Crop Protection Companies	Market Share
1	Bayer E.A.	19%
2	Syngenta	17%
3	Amiran Kenya	10%
4	Farmchem	10%
5	Elgon Chemicals	7%
6	Agriscope	1%
7	Osho Chemicals	8%
8	Twiga Chemicals	6%
9	Murphy Chemicals	5%
10	Juanco	5%
11	Prestige	1%
12	Lachlan Agriculture	5%
13	City Farming	1%
14	Agrichem & Tools	2%
	Others	3%
	Farmer Value KSh. Millions	6.750,-

**Exhibit 4: Comparative Price Changes in Alternative Channels**

**E.g. FARMURON 250GRAMS**

FARMCHEM	DISTRIBUTOR	INDEPENDENT AGROVETS	LARGE FARMERS/ COOPERATIVES
100%	7%	8%	7%
Prices in Kshs 509	545	550	545

**Exhibit 5: Supply Network**



**Exhibit 6: Farmchem's Sales Channel**

<b>channels of sales</b>	<b>sales volume in %</b>
DISTRIBUTORS	75%
LARGE SCALE FARMERS	15%
COOPERATIVE SOCIETIES	10%
TOTAL	100%

### Exhibit 7: Farmchem's Sales Trend

