5.0 Cargill Incorporation

If you are what you eat, then part of you comes from 134-year-old company you may never have heard of. Cargill Inc., America's largest privately held corporation, it hardly a household name, but it touches nearly every household. Chances are good that it supplies the flour in your bread, the oil in your salad dressing, the concentrate in your orange juice, the beans in your coffee, the sweetener in your soft drink, the malt in your beer, the peanuts in your butter, the cocoa in your candy bar, the salt on your table and the steak on your barbecue.

Cargill is enormous. With revenues of $49.1 billion in the year of 1991, this giant commodity merchant is America's second-largest diversified services company, topped only by AT&T (1991 sales: $63.3 billion). The following table demonstrates the America's largest privately held companies.

Table 1: American's Largest Privately Held Companies

<table>
<thead>
<tr>
<th>Companies</th>
<th>1991 Sales ($ billions)</th>
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</thead>
<tbody>
<tr>
<td>Cargill</td>
<td>49.1</td>
</tr>
<tr>
<td>Koch Industries</td>
<td>18.0</td>
</tr>
<tr>
<td>United Parcel Service</td>
<td>15.0</td>
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<tr>
<td>Continental Grain</td>
<td>14.1</td>
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<tr>
<td>Carlson Cos.</td>
<td>9.3</td>
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<tr>
<td>M &amp; M Mars</td>
<td>7.5</td>
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<tr>
<td>NWA</td>
<td>7.5</td>
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<tr>
<td>Bethel Group</td>
<td>7.5</td>
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<tr>
<td>Goldman Sachs</td>
<td>7.0</td>
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<tr>
<td>R.H. Macy</td>
<td>6.8</td>
</tr>
<tr>
<td>Ernst &amp; Young</td>
<td>6.3</td>
</tr>
<tr>
<td>Publics Super Markets</td>
<td>6.2</td>
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<tr>
<td>KPMG Peat Marwick</td>
<td>6.0</td>
</tr>
<tr>
<td>Pritzker Family Cos.</td>
<td>6.0</td>
</tr>
<tr>
<td>Supermarkets General</td>
<td>5.7</td>
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</tbody>
</table>

(Source: Fortune, July 13, 1992)
Cargill was founded in 1865 in the United States. Based in Minneapolis, U.S.A., Cargill is an international marketer, processor and distributor of agricultural, food, financial and industrial products with a total of 79,000 employees in more than 1,000 locations, in 72 countries worldwide.

5.1 Cargill Market Segment
Generally Cargill is engaged in three global market segments which are as follow:

Figure 1: Cargill Incorporation – Global market Segments

(Source: Cargill Website)

1. Commodity Trading & Processing
   a) Commodity Trading
   This is a pure buying and selling activity. Cargill trades in edible products such as cocoa and cocoa products, coffee, cotton, shrimps, meat, rice, palm, coconut, tapioca, fats and juices, tallow, sugar and grains. Non edible products include rubber, molasses, fertilizers, jute, wool, hemp and energy.

   Because of the great volume of merchandise to be transported, Cargill utilizes a combination of its own fleet and transportation services purchased from outside services.

   b) Processing
   Cargill produces animal nutrition, cattle feedlots and contract hog production, cocoa, corn milling, fertilizer production and distribution, flour and rice milling,
fruit juices, malt, meat (beef, pork, poultry, eggs), oilseeds processing, salt and seed.

Cargill is the largest cocoa grinders in the world and largest oilseed processor with vegetable oil refineries on almost all continent.

2. Industrial
This includes steel manufacturing, steel recycling, steel processing, global steel merchandising, producer of resins, mine rock, phosphates and solar salt. North Start Steel, a subsidiary of Cargill, produces nearly 3 million tons of steel annually.

3. Financial
The Financial Market Division (FMD) supports Cargill and its subsidiaries with financial products and services that address the full spectrum of market conditions. These include financial instrument trading, futures brokerage and risk management, investment in real estate & other financial assets, leasing and trade & structured finance.

5.2 Cargill Products Segments
For administrative and customer service purposes, Cargill's market segments are organized into five product areas. These include food, agricultural, trading, animal nutrition & meat, and worldwide steel. Together, these businesses comprise more than 40 product lines.

a) Food Sector
Cargill buys, processes, stores, transports and sells a wide variety of food products worldwide, ranging from basic ingredients used in food production to consumer products. Cargill ingredients and products include refined vegetable oils, corn and flour milling products, fruits and fruit juice concentrates, cocoa and chocolate products, rice and malt, salt, soy proteins, egg products, beef, pork, chicken, turkey and many others.
b) Agricultural Sector
Cargill provides a range of high quality, competitively priced farm products to growers, including seed, fertilizer and other goods and services needed by producers worldwide. Cargill Research is dedicated to developing agricultural products that address the needs of customers around the world.

c) Trading Sector
Cargill markets, handles, stores and transports a wide range of commodities from traditional grains and oilseeds such as wheat, corn, soybeans, sorghum, rice, barley, oats, rye, sunflower seeds and canola to coffee, cotton, fats and oils, rubber, sugar and petroleum on a worldwide basis. The trading sector also manages Cargill's transportation operations including its barge, ocean freight/vessel chartering and stevedoring services.

The Financial Markets Group's products and services include proprietary trading in financial instruments, value investing in real estate and other assets and trade and structured finance. Cargill also offers capital equipment leasing and is a future and futures options broker and risk management consultant.

d) Animal Nutrition & Meat Sector
Cargill produces a range of animal feeds and feed ingredients. The company also produces processes and markets poultry, beef, pork and further-processed meat products to retail, foodservice and processing customers. We market turkeys and turkey parts under the Honeysuckle White® and Riverside® brands. Cargill also markets a complete line of fresh, frozen, ready-to-cook and fully cooked chicken products. Our Excel beef and pork, and Honeysuckle White turkey are widely known and respected brand names.

e) Worldwide Steel
Worldwide Steel operates one of the fastest growing networks of mini-mills in the United States. Using energy-efficient electric furnaces, the company produces billets to make wire rods, angles, channels, seamless pipe and reinforcing bars. Our recycling subsidiary supplies scrap metal to our own and other U.S. mills. Cargill Steel and Wire's service centers cut and slit flat rolled
steel. Additionally, the department produces concrete reinforcing wire, chain link fencing, wire mesh and industrial wire.

5.3 Cargill Oilseed Malaysia

Cargill's Oilseed business in Malaysia consists of two different companies which undertake 2 primary business. These businesses operate from 2 different sites, one on the East Coast in Kuantan and one on the West Coast in Port Klang. Cargill acquired these businesses in late 1991 and has invested significantly in them since the time to develop the people and physical assets into operations. The companies were called Kupak and Olinco but effective 1 June 1996, the name had been changed to Cargill Palm Products (CPP) and Cargill Specialty Oils and Fats (CSOF). As for the study purposes, the name when Cargill Oilseed Malaysia is use is referring to CSOF only and not CPP.

The main business of Cargill Oilseed Malaysia including the following:

a) Bulk palm oil refining in which Cargill source palm oil from Malaysia plantations or occasionally overseas sources and process this oil into refined bleached and deodorized (RBD) palm oil. In addition Cargill further process approximately 50% of this volume by fractionating the RBD palm oil into RBD palm olein (liquid) and RBD palm stearin (solid). The olein is the primary product and it competes with liquid oils like soybean, canola oil and etc. for frying applications. Most of the production is shipped away from the plant in bulk with over 95% of the production being exported. As means of adding value to the bulk oil production, Cargill also produce shortening, margarine, vegetable ghee and packed olein. The packed products are sold primarily to industrial customers with over 80% exported.

b) Confectionery Specialty Fats in which crude palm kernel oil (CPKO) is source from Malaysian Kernel crushers, or occasionally overseas sources, and fractionate the CPKO into crude palm kernel stearin (CPKST) and crude palm kernel olein (CPKOL). The CPKST after hydrogenation and refining, becomes cocoa butter substitute, most of which is marketed in 25Kg cartons to destination worldwide. The CPKOL is the by-product and after processing it
is marketed as a cheaper coating fat or in bulk as a raw material for oleo chemical industry. Below are some examples and application of the products.

**Cocoa Butter Substitute (Super Socolate Special)**
Cocoa Butter Substitute (CBS) is used in compound chocolate flavored products where the chocolate flavor comes from cocoa powder and there is no actual cocoa fat (cocoa butter) in the end product. Palm kernel stearin's unique characteristic which makes it so well suited for this application is the melting curve, that is very closely resembles that of cocoa butter compound is, in general, perceived to be an inferior product to real chocolate (produced from cocoa butter) but price and some functional reasons such as the ability to make a higher melting point product for tropical climates or to use a thin layer of chocolate flavored candy to enrobe other candy make CBS an important ingredient for the world confectionery industry. Some common products, which are produced using CBS, are Baby Ruth candy bar, Kit Kat wafers and most chocolate Easter bunnies.

**Hysoc**
Hysoc is a premium grade plastic butter prepared from lauric oil and depending on the desired application is tailor made as a complete cocoa butter replacer for coating of confectioneries in tropical climate. It is suitable for coating of biscuit and sweet confectioneries as well as fillings for sweets, sandwiched biscuits and wafers. It is highly recommended as replacer fat in coffee whitener and skimmed milk powder. The availability of the Hysoc range of products with various melting points also allows the choice of the best cocoa butter replacer fat for the application desired.

**Socolate**
Socolate is a fully refined and hydrogenated fat of palm kernel olein oil. It is a moderately hard fat, which is well accepted by the confectionery industry. Depending on the desired melting point, these fats are extremely suitable for toffees, wafer/biscuits fillings, caramels, chocolate type vermicelli, coffee whitener and center fillings
Socfat
Socfat is a multipurpose shortening for use by the baking industries in the preparation of various products including bread, biscuits, cakes and pastries. Socfat is blended from palm, palm kernel and liquid oils, and is specially texturised to impart excellent plasticity, smooth consistency to facilitate mixing and ease of use at normal ambient temperatures.

Vegetable Ghee
Palm oil can be blended with palm stearin to form vegetable ghee. Vegetable ghee is much desired by consumers who generally do not consume animal fats. Palm-based vegetable ghee has the granular structure popular with consumers, a smooth flavor and excellent cooking performance.

Cooking Oil
RBDPOL is most suitable for this purpose and it has been used for processing potato chips, French fries, instant noodles, doughnuts, fried chicken and snack foods. The relative stability of palm olein at frying temperature and its lower rate of oxidation makes it an excellent medium for frying. These distinctive properties also extend the frying life of the oil, making it very economical.