

## Rising market Control of Transnational Agribusiness

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Agriculture around the world is witnessing an unprecedented change. The manner in which food was and is still grown in many parts of the world and made available to the people for consumption is fast changing. The developed world especially is undergoing a structural transformation of its agriculture sector which can best be described as “industrialization of agriculture” and many economists have started referring to this present stage of agricultural development as “food manufacturing”.

Agriculture globally is being increasingly dominated at a rapid pace by transnational corporations, like Cargill, Archer Daniels Midland and Monsanto to name a few. The market dominance of these agribusinesses is wide spread and deep not only in the domestic markets but is also spreading rapidly globally.

These corporate giants are now involved at each stage of the agriculture system. Depending on which stage of the food production process they are involved in, these companies can be classified in to four types.<sup>1</sup>

Type of companies	Activity	Examples
Agro-chemical and seed companies	Produce farm inputs such as fertilizers, pesticides, seeds and other production inputs etc.	Monsanto, Dow, Dupont, Bayer, Syngenta etc.
Processing companies	These companies buy and process farm output and livestock	Cargill, ADM, Conagra/IBP, Tyson, Smithfield foods etc
Food manufacturers	Produce food products and saleable brands for the consumers	Nestle, Phillip Morris, Unilever, PepsiCo, Coca-cola et.
Food retailers	Sell the final finished product to the consumers.	Wal-Mart, Carrefour, Ahold, Metro, Albertsson's

In order to understand the spread and the extent of penetration enjoyed by these few companies, a look at the domestic and world market shares of some of the larger corporations in the products they deal in is quite revealing. The United States is the home to six of the top ten Agri-corporations of the world. The notable among them are **Cargill, Monsanto, Dupont and Archer Daniels Midland** to name a few. We look at some of the US based private agribusiness, starting with Cargill.

### **Cargill Fact sheet**

Cargill, Incorporated is an international marketer, processor and distributor of agricultural, food, financial and industrial products and services with 98,000 employees involved in more than 50 lines of businesses in

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<sup>1</sup> <http://www.agribusinessaccountability.org/page/data/>

800 locations in 61 countries.<sup>2</sup> It is the single largest private corporation in the US. It is the 3rd largest food and drink company in the US, the 3rd largest in Europe, the largest in Asia and the largest in South America and thus clearly one of the most powerful agribusinesses in the world. In 1997 its global revenue was \$56 billion, generating net earnings of \$814 million, making it wealthier than many developing nations. Net earnings have jumped to **\$1,290 million in 2003**.<sup>3</sup>

According to US laws private companies like Cargill are not required to publish or make public any information about their activities. Thus information on company details is very hard to come by.

Cargill came into existence as a lone grain store house in 1865, started by William and Samuel Cargill, sons of a Scottish sea captain in Iowa. Since it has grown to deal in all kinds of food produce such as wheat, corn, oilseeds, soya, cotton, coca, fruits, peanuts, palm as well as livestock- chicken, turkey, pork and beef. It not only trades in these commodities but also owns food processing, manufacturing and transportation businesses, adds value, by producing semi-finished and finished produce which it then sells to other food manufacturers and retailers. It produces cattle feed, fertilizer, other goods and farm services. It also gives consultancy, management and technical assistance services in all aspects of agricultural and agribusiness development to farmers and government agencies.

“Cargill is **the world’s largest grain trader, oilseed processor and malting barley producer**. In the US Cargill has the largest grain handling capacity with more than \$40 million bushels of terminal capacity. In addition to this domestic dominance, it has an export capacity of 2390200 bushels in Canada. In Argentina and Brazil it own 24618033 bushels of export terminal capacity<sup>4</sup>. **Cargill controls about a quarter of the world’s grain production** with the nearest rival being Archer Daniels Midland, another US company. Cargill secured its position in 1998-99 by buying the grain handling business of Continental Grain in the US, its second largest rival after ADM.

This gives the company unparalleled power to control prices around the world. This it can do and does so by either flooding the markets with grain or by keeping its grain transportation ships at high seas for months. The company control goes to the extent of owning satellites which predict future drought prone or bountiful areas across the world.

Cargill is also the largest beef packer in Canada; the third largest beef packer and flour miller in the US; the fourth largest cattle feeder and sixth largest turkey producer in the US, and the **second largest phosphate fertilizer producer in the world**. Cargill is also a major power in salt, peanuts, coffee, truck transport, river/canal shipping, molasses, livestock feed, steel, hybrid seeds, rice milling, rubber, citrus, chicken and fresh fruits and vegetables<sup>5</sup>. Cargill has its largest offices in Canada, Brazil, Argentina and Europe.

Cargill’ international dominance can be gauged from just the fact that in Brazil alone it is the fifth largest exporter of Brazilian coffee, handles 20% of the countries soybean exports, processes 25% of its Coca, is the third largest orange juice producer in the county and the second largest seed company<sup>6</sup>.

Cargill’s trade in 1995 in Argentina was the second largest among all US affiliates at \$962 million, comprising of mostly grain products, while exporting 19% of its oilseeds.<sup>7</sup>

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<sup>2</sup> <http://www.cargill.com/prodserv/wwpres.htm>

<sup>3</sup> [http://www.hoovers.com/company-information/--ID\\_\\_40079--/free-co-fact-sheet.xhtml](http://www.hoovers.com/company-information/--ID__40079--/free-co-fact-sheet.xhtml)

<sup>4</sup> 2002: Grain and Milling Annual

<sup>5</sup> <http://www.corporatewatch.org.uk/magazine/issue7/cw7f6.html>

<sup>6</sup> <http://www.corporatewatch.org.uk/magazine/issue7/cw7f6.html>

Cargill's world wide earnings for the year 2003 from continuing operations were \$1.042 billion<sup>8</sup>.

### **Monsanto Fact Sheet:**

Monsanto another US based company deals in genetically modified crops-(GM), agro-chemicals, seeds and bovine growth hormones. The company is operational in 52 countries<sup>9</sup> and is **the largest seller of GM crops in the world**. 80% of the world's farm lands planted with GM crops in 1999 were Monsanto products. It is the **second largest seed company in the world** with global sales of \$ 1,700 million.

In 2000 Monsanto merged with Pharmica & Upjohn to form Pharmica. Monsanto retained its agro-chemical, seed, bovine hormone and GM crop wings and now runs as a subsidiary with 87% ownership resting with Pharmica. In 2002 Monsanto and DuPont entered into both patent and technology sharing agreements after dropping legal action against each other. After Pharmacia sold of its stake, Monsanto has shrunk compared to its size in the 1990's. The bulk of Monsanto's income comes from its Roundup ready GM crops and Roundup herbicides. Being the biggest seller of GM crops in the world, its major sales are in US, Canada and Argentina and smaller sales in India and South Africa. Monsanto has been unsuccessful in Europe as its campaign to commercialize GM crop misfired evoking a moratorium<sup>10</sup>.

### **Dupont**

Dupont was the 33<sup>rd</sup> largest company and the 17<sup>th</sup> highest profit earner in US in 2002. It is, if not the largest, one of the largest chemical companies in the world and the 5<sup>th</sup> largest agro-chemical company globally.

It's a world leader in the manufacturing and sale of nylon and the leading manufacturer of titanium dioxide, elastane and fluoropolymer. It is also the leading supplier of resins and films for packaging, electronic material to the global electronic industry and holographic optical material for electronic, security and authentication applications.

Founded in 1802 in Delaware as a gunpowder and explosive company, today it is involved in the manufacture of products falling in 40 different product groups with around 640 different products and operates in 65 countries around 165 sites. It also owns over 20,000 world wide patents and over 14000 world wide patent applications.

### **Dupont's acquisition of Pioneer Hi-Bred in 1999 has made it the largest seed company in the world.**<sup>11</sup>

The company recorded a turnover of \$247 billion in 2001, agriculture accounting for 16%. Dupont's acquisition is seen as a part of its overall shift in a direction towards self development of GE crops resistant to its herbicides and pesticides. Dupont's share in the seed market will facilitate the sale of these GM products directly to the farmers.

### **Itochu**

A relatively new and non US based addition to the list of large corporations is the Japanese corporation **Itochu**. Founded in 1972, this relatively new company has 150 offices in about 80 countries and is Japans leading general trading company. The company is involved in seven major businesses, namely food, chemical, forest products and general merchandise, IT and aerospace, machinery and textiles. It **generates**

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<sup>8</sup> <http://www.cargill.com/finance/index.htm>

<sup>9</sup> <http://www.monsanto.com/monsanto/layout/default.asp>

<sup>10</sup> <http://www.corporatewatch.org.uk/profiles/biotech/monsanto/monsanto1.html#Anchor-35882>

<sup>11</sup> <http://www.corporatewatch.org.uk/profiles/dupont/dupont.htm#market>

**20% of its revenue from the food business.** Itochu employs 4355 non- Japanese workers around its five subsidiaries/affiliates and registered revenue of \$4723 million in 2003.

The food business of the company deals in 36 food products, the main being wheat, barley wheat flour, rice, soybean's, sunflower oil, olive oil, palm oil, coconut oil, soybean meal, rapeseed meal, raw sugar, coffee, coca, beef, pork and chicken. Many if not all of these food product lines are vertically integrated from raw material to the finished products, consolidating all supply chain processes from resource development, production to distribution and retail in both domestic and international markets<sup>12</sup>.

### **Mechanism of market dominance**

Almost all corporations began as small firms, but over time have come to grow in size and market share. **Of the 100 largest economies of the world, 51 are corporations while 49 are countries.** The top 20 corporations of the world are responsible for a quarter of the world's economic activity while employing less than 1% of the population<sup>13</sup>. Two ways in which this has come about is through the horizontal and vertical integration of the markets for products in which these corporate giants deal in.

**Horizontal integration:** In any industry or its sub-sector, say for instance the wheat sector in the agriculture industry, the presence of a large number of private purchasing firms encourages a competitive environment. This ensures that the farmers have a wide range of wheat buyers to approach and thus possesses economic power in terms of price bargaining. The purchasing firms on the other hand are constantly under pressure to give higher prices to farmers in the face of competition. Similarly in the market for instance for wheat based products, the presence of a large number of sellers/retailers would mean lower prices for the consumers. Thus a competitive set up is good for the farmers and producers of agricultural produce and live stock, as well as the end consumer.

However over time the concentration in the food processing and food manufacturing industries has increased tremendously and the market has moved from being a competitive one to a one more on the lines of oligopolistic or monopolistic in nature. From a time where there existed a substantial number of firms, in these two industries, today only a hand full of corporations control the entire market. This reduction in numbers has come about through the merger of companies, by the acquisition of smaller companies by the larger ones and forging of partnerships. Companies have realized that by increasing their market shares through mergers and acquisition gives them what is called 'Exit power'- which means that in any trading contract the party with the least to lose has greater bargaining power. Thus farm input suppliers have merged with, acquired or forged partnerships with other input suppliers and so have the food processors and food manufacturers. This implies that in the wheat market for instance, with the presence of a few large input suppliers and buyers, the wheat seller/farmer has only a few sellers/purchasers to choose from and is forced to accept the offered prices in the absence of holding power and in the hope of continuing cultivation. While on the other hand the companies have accesses not only to the entire domestic market through their wide network of transportation facilities, but also the international markets. So they are under no compulsion to buy from farmers demanding higher prices.

Cargill for instance, after having acquired Continental's grain handling business in 1998-99 has become the biggest grain handler in the US and owns the largest number of grain elevators, rail tracks and barges. With this Cargill now handles at least 40% of US corn exports, a third of all soybean exports and 20% of wheat exports. This has given Cargill the largest grain transportation net work in the country, which means it is

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<sup>12</sup> [http://www.itochu.co.jp/main/div/food/index\\_e.html](http://www.itochu.co.jp/main/div/food/index_e.html)  
<http://biz.yahoo.com/ic/41/41870.html>  
[http://www.hoovers.com/itochu/--ID\\_\\_41870--/free-co-factsheet.xhtml](http://www.hoovers.com/itochu/--ID__41870--/free-co-factsheet.xhtml)

<sup>13</sup> <http://www.ips-dc.org/reports/top200.htm>

not dependent on farmers in a particular region and can buy grain from where ever it gets the lowest prices. Additionally it also has easy accesses to world wide grain sellers and therefore has very high 'Exit power'. In fact after the merger, in certain regions of US, especially along the Illinois and Ohio rivers, Cargill and ADM are now the only grain trader/purchaser available to farmers, who now have no option but to accept the prices offered to them by these two, unless they choose to incur additional transportation costs to find higher paying markets. Such consolidations have intensified the market concentration. Most food markets like the wheat markets are witnessing similar rise in concentration towards a **monopolistic market structure** away from a competitive one. Most literature on this debatable issue of what constitutes an oligopolistic or near monopolistic market, is of the opinion that any industry with four firms controlling more than 40% of the market are able to exert influence on the market unlike that in a competitive situation<sup>14</sup>.

**CR4** is a concentration measure, relative to 100% of the top four firms in a specific food industry. According to this measure the concentration of food trading companies in 2002 was as follows.

#### **Terminal grain handling facility**

CR4 = 60%. The four companies concerned were

- 1) Cargill.
- 2) Cenex harvest states,
- 3) ADM,
- 4) General mills.

#### **Corn Exports**

CR3 = 81%

- 1) Cargill-Continental grain
- 2) ADM
- 3) Zen Noh

#### **Soybean Export**

CR3 = 65%

- 1) Cargill-Continental grain
- 2) ADM
- 3) Zen Noh

The level of concentration in the food processing industry sub-sectors:

#### **Flour Milling**

CR4=61%

- 1) ADM milling
- 2) ConAgra's
- 3) Cargill
- 4) General Milling

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<sup>14</sup> <http://www.agribusinessaccountability.org>

## **Soybean Crushing** CR4=80%

- 1) ADM
- 2) Cargill
- 3) Bunge
- 4) AGP<sup>15</sup>

Like wise the Acquisition of Pioneer Hi-Bred by Dupont has made the latter the largest seed company in the world. This would imply that the number of seed sellers in the market has gone down and the farmers are faced with fewer companies to choose from and would have lesser price options open to them.

## **Vertical integration:**

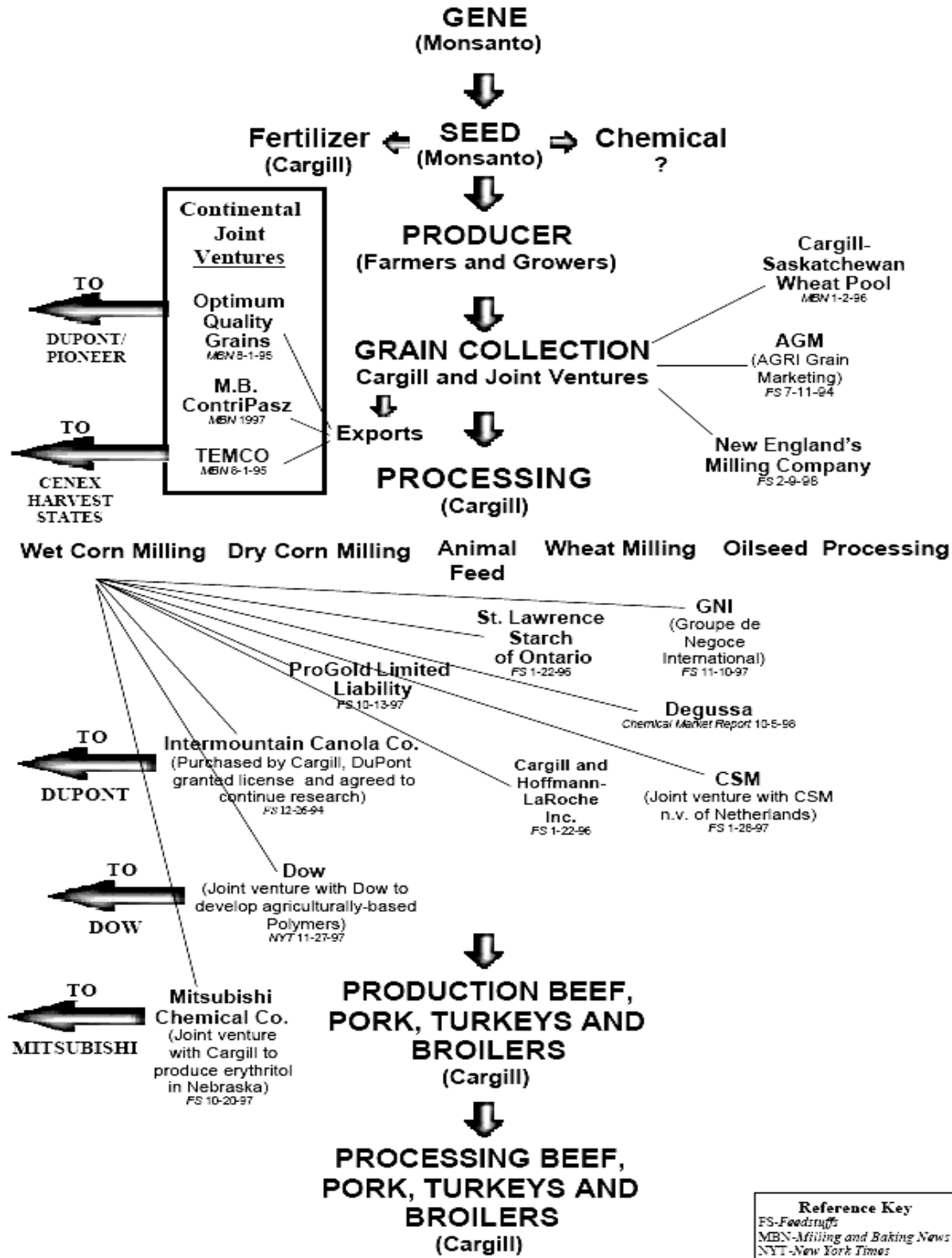
Apart from expanding, companies have also consolidated their position by vertically integrating the various stages of the agriculture system. Companies such as Cargill, Monsanto in food grains and Tyson foods in live stock not only grow crops and rear livestock but also processes and manufacture food products which they finally sell to the retailers. So companies who were engaged in one stage of the food system, have either diversified into other stages of the food system or have forged strategic allegiances through mergers, partnerships and acquisitions. By integrating all the stages of the food system the companies have come to own the products from the farm to the shelf translating into greater economic power.

Cargill for instance, to begin with has been involved in the agriculture system right from supplying seeds, fertilizer and other farm inputs, to the procurement and processing of food grains and other farm produce. In 1998 Cargill embarked on a joint venture with the GE giant Monsanto. With this it now has access to biotechnology and the genetically engineered products, which it would market through its extensive world wide network. With this joint venture Cargill has successfully integrated all aspects of the food production system. Being present at each stage of the process, the company owns the product at all stages of its processing, and dictates every thing from what will be produced where and in what quantities, all with a view to maximize profits. Joint ventures and merges of these type are fast becoming the norm and are not restricted to just two companies but involve more than two companies leading to the emergence of what are termed as **food chain clusters**. The Cargill/Monsanto network is depicted in the following diagram, followed next by the Novartis/ADM network

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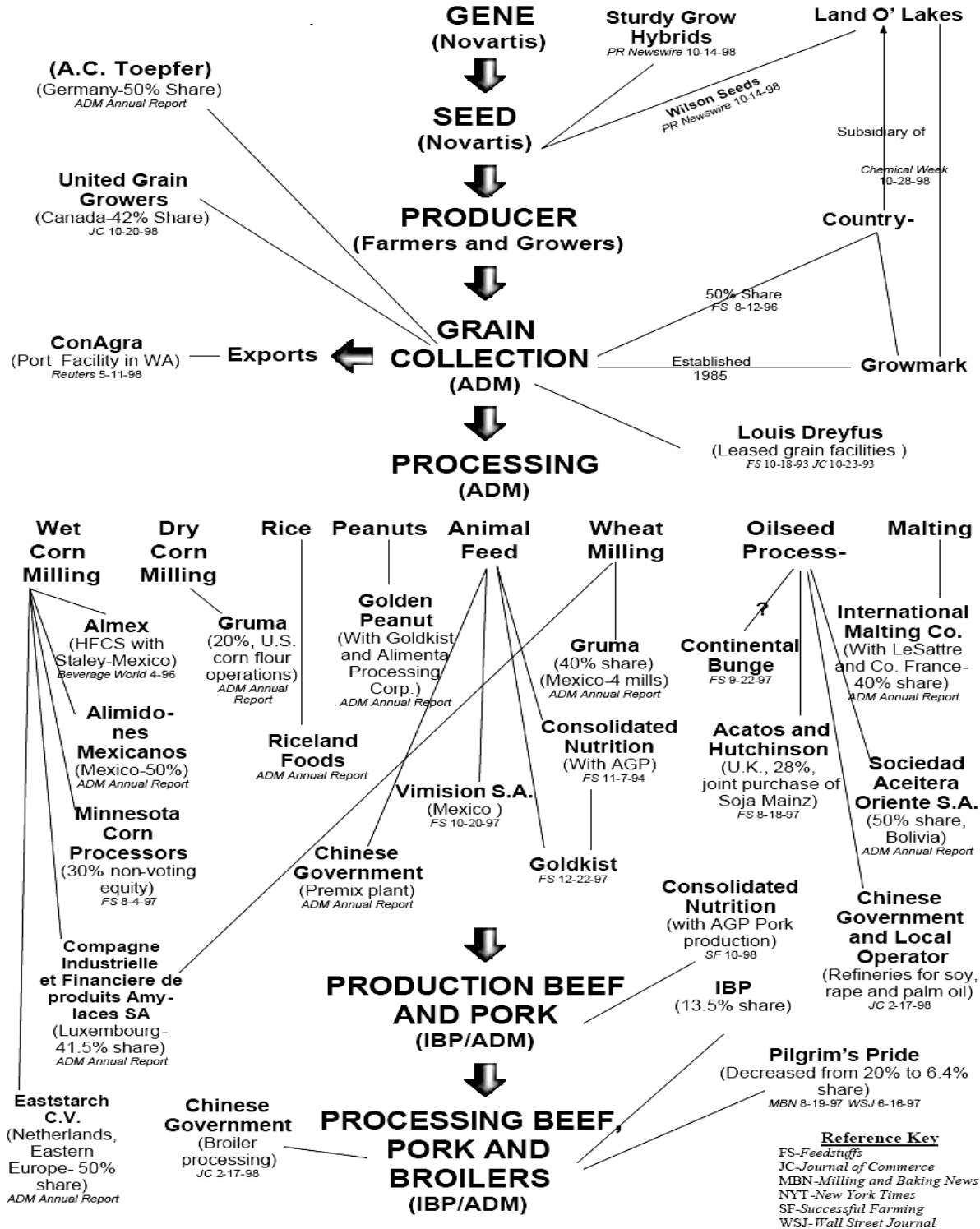
<sup>15</sup> <http://www.agribusinessaccountability.org>

# Cargill/Monsanto Joint Ventures and Strategic Alliances



<sup>16</sup> [http://www.agribusinessaccountability.org/pdfs/44\\_Cargill%20Monsanto%20diagram.pdf](http://www.agribusinessaccountability.org/pdfs/44_Cargill%20Monsanto%20diagram.pdf)

# Novartis/Archer Daniels Midland (ADM) Joint Ventures and Strategic Alliances





These clusters consist of more than two companies who have formal and informal agreements amongst themselves. As the diagram indicates, the Cargill/Monsanto cluster begins with these companies at the top of the pyramid but in-effect the entire network consists of numerous joint ventures with a number of companies to produce related processed products. The emergence of one cluster forces other companies to cluster together as individually they are less competitive and can remain viable only by forming a cluster of their own.

For instance ADM another US giant has joint ventures with the Swiss GE-giant Novartis, forming another competing food chain cluster as seen from the diagram above<sup>17</sup>. ADM not only trades in the grains grown from the genetically engineered seeds produced by Novartis but also processes them and sells the processed commodities to around 17 different companies. Additionally ADM's beef and pork businesses are vertically integrated from production to the shelf or popularly called – 'dirt to dinner'.

These agreements and tie-ups among companies have created a complicated web which is becoming ever difficult to unravel and understand. It is near impossible to ascertain the true origins of food found on the market shelves these days. Such consolidation means that fewer and fewer companies are involved in all aspects of the agriculture system. Companies like Cargill can be found in the top four firms lists of more than one food/farm produce groups. Thus a handful of companies have through horizontal and vertical integration come to control the agri-business sector.

As a result the food system is now being compared to an hour glass, where a large number of farmers engaged in production of food are compared to the sand on top, which then passes through the narrow part, analogous to the few Agri-firms processing and manufacturing it and then finally distributing to millions of consumers world wide<sup>18</sup>.

Such wide spread and invisible control of the food system has given unshakable power to the Agri-corporations and the new emerging clusters in terms of the prices offered to the farmers. Increasingly the existence of country wide markets for farm produce are vanishing and are being replaced by direct contacts between the producers and the trading/ processing companies. These contracts give direct accesses to the company representatives to the farm or ranch of the farmer and dictate terms in all aspects of the produce quantity and quality. With the new advances in gene research, such as the 'terminator seed' technologies developed by Monsanto, the farmers would depend on the companies from the very beginning of the production process and would own nothing more than the land, while being paid at a per-unit basis for the output.

Such clustering of companies has greatly reduced the earlier prevalent level of competition in the Agri-business, when firms operated individually. This slow yet sure move towards a monopolistic market structure has reduced competition and increased the margins for the procuring and processing firms while at the same time reducing farm incomes and increasing the prices for the consumers.

The fact is that the profits in Agri-businesses are quite high, but are just not available for the farmers, as they lack economic power which squarely lies with the firms. In 2002, 40% of the farmers rented in land for cultivation purposes and therefore had to pay rent to the land owners. Due to competition amongst the farmers the rentals are driven up and the farm incomes down. As the cultivable amount of land is fixed the value of land is dependent on the value of the produce. If the price of corn goes up, then so does the rent for the corn growing land, benefiting the landowners more than the farmers.

With the consolidation of the Agri-business through horizontal and vertical integration, the incomes for the farmers have gone further down. Agri-businesses have eaten into farm incomes through numerous

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<sup>17</sup> [http://www.agribusinessaccountability.org/pdfs/44\\_Cargill%20Monsanto%20diagram.pdf](http://www.agribusinessaccountability.org/pdfs/44_Cargill%20Monsanto%20diagram.pdf)

<sup>18</sup> [http://www.agribusinessaccountability.org/pdfs/42\\_Consolidation%20in%20Food%20and%20Ag%20System.pdf](http://www.agribusinessaccountability.org/pdfs/42_Consolidation%20in%20Food%20and%20Ag%20System.pdf)

economic and political arm twisting methods. In the economic sphere this has been achieved in the following manner. When farmers don't own the land they cultivate, the only way to increase profits for the firm is to make land less profitable and appropriate the rent by a) making the seed supply restricted and thus pushing up the prices making the seed more valuable than the land. Further monopolies can make it difficult for farmers to sell their produce and drive the prices down which will also make land less valuable and increase the firm's profits.

Even when the farmers own the land the Agri-businesses would in a similar manner appropriate the profits which were/are available to landlords/landowners making land less valuable. The value would instead lie in the patented seeds and the captive value.

The supply chain structure and the emerging contract farming too have meant reduced farm incomes. Contracting means that the firms have a greater say in all aspects of production and decision making which has shifted to the corporate office room. Farmers have been reduced to a position of being mere caretakers, being paid the minimum wages which are being driven down to the lowest due to prevailing intra farmer competition. USDA estimates indicate that in 1999, 989,000 workers were hired, who on an average were paid \$ 7.83 per hour.<sup>19</sup>

Clearly of all the players in the Agri-business right from the farmer to the consumer, it's the farmers who are loosing the most and are being forced to either abandon farming or accept the terms offered to them by the big firms. Unless this trend is checked, the right of farmers to cultivate the world over would be increasingly threatened and the world's food supply would come to be controlled by a handful of individuals whose primary objective is not accesses of affordable food for the hungry and the poor but the maximization of profit.

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<sup>19</sup> [http://www.agribusinessaccountability.org/pdfs/181\\_An%20Essay%20on%20Farm%20Income.pdf](http://www.agribusinessaccountability.org/pdfs/181_An%20Essay%20on%20Farm%20Income.pdf)