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Globalization, Inc.

Concentration in Corporate Power: The Unmentioned Agenda

Issue: Concentration in corporate power is the defining feature of today's global economy. The "life sciences" industry is converging into new corporate structures that have profound implications for every aspect of commercial food, agriculture, and health.

- The top 10 pharmaceutical companies control an estimated 48% of the \$317 billion world market.
- The top 10 veterinary pharmaceutical companies control 60% of the \$13.6 billion world market.
- The top 10 seed firms control 30% of the \$24.4 billion commercial seed market.
- One company's genetically modified (GM) seed technology (Monsanto now owned by Pharmacia) accounted for 94% of the total area sown to GM crops in 2000.
- The top 10 agrochemical corporations control 84% of the US\$30 billion agrochemical market.
- The 32 leading grocery retailers account for 34% of the total global food retail market, estimated at \$2.8 trillion. The top 10 grocery retailers account for \$513.7 billion or 54% of total sales for the top 32 retailers.

Impact: Corporate hegemony is overwhelming governments and subverting national sovereignty. When governments become subservient to corporations instead of citizens, democracy is undermined, diversity is destroyed, and human rights are jeopardized. The trend in corporate consolidation is mirrored by growing disparities between rich and poor, both within and between OECD nations and the South.

Players: This issue of the *ETC Communiqué* provides a brief, sector-by-sector analysis of the leading companies involved in the closely related fields of pharmaceuticals, biotechnology, genomics, seeds, agrochemicals, food & beverage processing, and mega-grocery retailers.

Policy: Heads of State convening at the World Food Summit Five Years Later, 5-9 November, cannot address world food security without addressing the impact of corporate hegemony. The creation of a new United Nations Centre on Commerce and Technology, with an expanded mandate to monitor and analyze multitechnology and multi-sectoral mergers and alliances, is long overdue. The "unfinished agenda" for sustainable food security that the International Food Policy Research Institute will present in Bonn, 4-6 September, fails to include the "unmentioned agenda:" ownership, control and consolidation with respect to food security.

The Action Group on Erosion, Technology and Concentration, formerly RAFI, is an international civil society organization headquartered in Canada. The ETC Group (pronounced Etcetera Group) is dedicated to the advancement of cultural and ecological diversity and human rights. Our new web site, www.etcgroup.org is under construction. All RAFI and ETC Group's publications are available at: www.rafi.org

"An ingenious device for obtaining individual profit without individual responsibility." The definition of a corporation, Ambrose Bierce, "The Devil's Dictionary," 1911

Introduction

Concentration in corporate power is perhaps the defining feature of the global economy at the dawn of the new millennium. Extraordinarily powerful new corporate configurations are replacing governments and engineering new mechanisms of monopoly control over resources and technology.

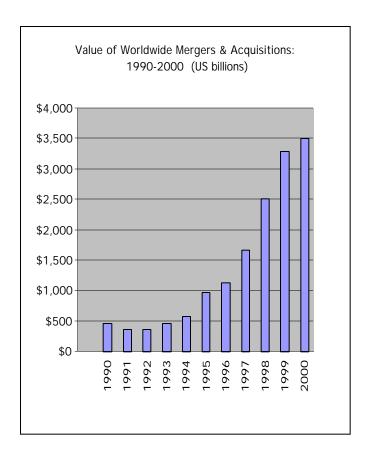
RAFI has been monitoring corporate concentration in food, agriculture, and the "life industry" for several decades. Under our new organizational name, the ETC Group will continue to monitor ownership and control of new technologies, and we will promote actions and policies to counter the erosion of rights and the undermining of democracy. This issue of ETC Communiqué provides a sector-by-sector analysis of the leading companies involved in the closely related fields of biotechnology, genomics, seeds and agrochemicals, pharmaceuticals, and food (processing and retailing).

The "life sciences" industry is converging into new corporate structures that will profoundly affect commercial food, agriculture, and health. New corporate configurations and technologies are blurring the lines between traditional sectors. In the future, it will become difficult to distinguish between ag biotech, biopharmaceuticals and human genomics, for example. The synergies between biotech, food retailers, and pharma are likely to grow dramatically in the coming decades as a new generation of "consumer friendly" biotech products debuts. Emerging technologies such as nanotechnology and neurosciences will also play a role in the corporate quest for "integrated science." (For detailed analysis, see "Biotech's Generation 3" RAFI Communiqué, November/December 2000.)

The Big Picture: Corporate Hegemony

The past 10 years witnessed a staggering concentration of corporate power across virtually all sectors of the global economy. The worldwide value of corporate mergers and acquisitions increased from \$462 billion in 1990 to over \$3.5 *trillion* in 2000. Last year, cross border deals accounted for 35% of all mergers and acquisitions.

The value of worldwide mergers and acquisitions in 2000 (\$3.5 trillion) was roughly equivalent to 12% of total world economic output.



Consolidation in corporate power is mirrored by growing disparities between rich and poor, both within and between OECD nations and the South.

According to the UN Development Programme, the richest 1% of the world's population receives as much income as the poorest 57%.²

It is estimated that OECD countries hold 97% of all patents, and global corporations 90% of all technology and product patents. (HDR, 2000, p. 84).

Corporations are wielding economic might to gain enormous political power. As governments become subservient to corporations instead of citizens, democracy is undermined. A study by Sarah Anderson and John Cavanagh of the Institute for Policy Studies finds that of the 100 largest economies in the world, 51 are corporations and 49 are nation states.³ A comparison of corporate sales and country GDPs reveals that General Motors is bigger than Denmark, Wal-Mart is bigger than Norway, General Electric is bigger than Portugal.

Combined sales of the world's **200** largest corporations accounted for 28% of the world economic activity last year, but the top 200 corporations provide only a tiny fraction of the world's jobs. Last year, the top 200 employed less than 1% percent (0.78%) of the world's workforce.⁴

Combined sales of the world's **top 500** corporations in 2000 were equivalent to 47% of the world's gross national income. ⁵ These companies collectively employed only 1.59% of the world's workforce.

(For more in-depth analysis, please see the excellent report by Sarah Anderson and John Cavanagh, *Top 200: The Rise of Corporate Global Power*, Institute of Policy Studies, December 2000. http://www.ips-dc.org)

ETC Group examines the following major sectors and their closely related subsidiary industries:

Pharmaceutical Sector - Subsidiary industries:

- Publicly-Held Biotechnology Companies
- Genomics
- Veterinary Pharmaceuticals

Agrochemical Sector - Subsidiary Industries:

- Ag Biotech
- Seeds

Food & Beverage Industry

Global Grocery Retailers

Pharmaceutical Sector

Overdosing on Fat Profits?

Last year, the pharmaceutical sector delivered a whopping 17% return on both revenues and assets – outpacing any other industry. Bottling money is the way *Fortune* magazine describes big pharma's performance. All of the top 10 drug companies had pharma profit margins exceeding 18% in 2000. GlaxoWellcome – before merging with Smith Kline Beecham – recorded a profit margin over 30%; Hoffman-La Roche's topped 44%.

The value of the pharmaceutical market has grown from an estimated \$70 billion in 1981 to \$317 billion in 2000.

In 1981, the top 10 companies held just over 20% of the global pharmaceutical market. Today, the top 10 drug companies control an estimated 48% of the \$317 billion world market.

Industry analysts predict that big pharma's future profits may be less spectacular. Blockbuster drugs (generating revenues in excess of \$1 billion) are clogged in the pipeline, patents on current ones are expiring, and citizens worldwide are painfully aware that only the wealthiest can afford to get "healthy" on prescription drugs.

- According to the *UN Development Report*, 1,223 new commercial drugs were released worldwide between 1975 and 1996, but only 13 were developed to treat tropical diseases and only four were the direct result of pharmaceutical industry research.⁷
- In 1998 global spending on health research was \$70 billion, but just 0.42% was dedicated to vaccines for HIV/AIDS (\$300 million) and about 0.14% (\$100 million) was devoted to malaria research.

Bloated profits and monopoly patents have become a high-profile political issue in the North and the South. In the United States, the elderly have seen annual spending for prescriptions soar 116% since 1992. US spending on prescription drugs shot up 18.8% last year, an increase of \$20.8 billion.

Big pharma's image took a beating earlier this year when it charged that South Africa was infringing monopoly patents by attempting to import cheaper anti-AIDS drugs for poor people. Stung by the negative publicity, the industry was forced to withdraw its high-profile lawsuit in April 2001. (For a more detailed discussion of the political uncertainties surrounding the patenting of life, see: "New Enclosures: Alternative Mechanisms to Enhance Corporate Monopoly and Bioserfdom in the 21st Century," *ETC Communiqué*, forthcoming, 2001.)

Analysts suggest that the future of big pharma will radically change with the field of pharmacogenomics and "personalized medicine." Sophisticated genetic tests capable of detecting minute variations in human DNA will someday enable doctors to predict not only the presence of a genetic disease (or the likelihood of getting it), but how an individual

would respond to a given drug, or avoid severe side effects. Kenneth Conway, president of Millennium Predictive Medicine told *Chemical & Engineering News*: "We think we're going to subdivide diseases. Once we get people with the right disease diagnosis,

the disease definitions are going to change from 'You have breast cancer' to 'You have molecular profile A,B,C, or D.' The treatments of those diseases are going to be different."¹⁰

Top 10 Pharmaceutical Companies

Company	Pharma Sales (US) Millions – 1999/2000	Pharma Profit Margin - 2000	% Share of World Market
1. Glaxo + Smith Kline Beecham	\$22,209.5	Glaxo – 30.9% SKB – 25.1%	7.0
2. Pfizer (includes Warner Lambert)	\$20,500	N/A	6.5
3. Merck & Co	\$17,481.6	26.4%	5.5
4. AstraZeneca	\$14,834	18.3%	4.7
5. Aventis	\$14,808.5 pro forma	17.6%	4.7
6. Bristol-Myers Squibb	\$14,309	28.1%	4.5
7. Novartis	\$12,697.7	28.5%	4.0
8. Pharmacia (includes Monsanto & Upjohn)	\$11,177	19.6%	3.5
9. Hoffman-La Roche	\$10,973.8	44.2%	3.5
10. Johnson & Johnson	\$10,694	33.6%	3.4

Source: ETC Group; based on data provided by Scrip's Pharmaceutical League Table, 2000

Publicly-Held Biotechnology Companies

Biotech Bubble Bursts:

Nature Biotechnology's annual survey of publicly traded biotech companies (*Nature Biotechnology*, May, 2001) includes 361 biotech companies worldwide; 76% of the total are US-based. ¹¹ The number of biotech companies in the 2000 portfolio shrank from the previous year, mostly due to consolidation; 33 biotech companies were lost to mergers and acquisitions from 1999 to 2000.

A large crop of new biotech companies joined the public ranks in 2000. Surfing on the wave of investor euphoria for high-tech stocks, 101 private biotech companies (38% from outside the US) went public on stock exchanges last year, raising over (US) \$20 billion. Today, with the world economy sputtering, and biotech stock prices crashing, analysts anticipate that biotech entrepreneurs will barely tread water in the stormy conditions ahead. As always, long-term survival for biotech companies depends on alliances and deal making with major

pharmaceutical enterprises. By and large, biotech companies are a farm team for big pharma. In 1994 drug companies "out-sourced" only 4% of their R&D; in 2000 that share grew to 20%.¹⁴

- Collectively, 361 publicly-held biotech companies spent \$9.59 billion on research and development during 2000, but the vast majority of the companies are cash-starved and without profit. Only 21% of the public biotech companies were profitable last year.
- The top 10 public biotech companies make up just 3% of the total number, but they account for 55% of both the total revenue and profit of the 361 companies. Still, only 8 of the top 10 biotech companies finished 2000 in the black.
- According to *Nature Biotechnology*, 21 biotech medicines were approved in 2000, and a total of 117 products are on the market.¹⁵ Nine of the top 10 biotech companies are manufacturers of medicines. The rest of the revenue-generating companies earn their money from the licensing of

platform technologies or early-stage products to pharmaceutical or biotech partners. ¹⁶

Biotech's Top 10

		1 op 1 o
Company	2000 Revenues (millions)	Comment
1. Amgen (US)	\$3,629	
2. Genentech	\$1,736	Ended year with net
(US)		\$68 million loss.
		Subsidiary of
		Roche Holdings.
3. Quintiles	\$1,659	
Transnational		
(US)		
4. Elan (Ireland)	\$1,521	Acquires Quadrant,
		Liposome, & Dura
		Pharmacueticals -
		ends year in the red.
5. Alza (US)	\$988	Johnson & Johnson
		acquired in \$10.5
		billion deal.
6. Chiron (US)	\$972	Novartis owns half
		the company.
		Chiron acquires
		Pathogenesis in
		2000.
7. Biogen	\$926	
8. Immunex	\$862	American Home
		Products holds
		41%.
9. Genzyme	\$752	
-	\$540	
10. MedImmune		
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Source: ETC Group, based on *Nature Biotechnology*, May 2001.

Genomics

In 1990 the US government launched the world's most ambitious publicly-funded biology program - the mapping of the human genome. A short time later, a handful of "gene boutiques" embarked on a commercial quest to patent and privatize the human genome. "Genomics" refers to the science of identifying the entire set of genes of living organisms. Although genomics is a subset of the biotech industry, it deserves separate mention. In February 2001 the private and public sector jointly unveiled the "finished" product – the initial sequencing and analysis of the human genome. ¹⁷ Although governments attempt to portray the human genome as a public sector good, the reality is far different. Industry's patent claims on millions of bits

and pieces of human DNA have successfully commodified human genetic material. ¹⁸ It took less than one decade. One industry CEO explains:

"Any company that wants to be in the business of using genes, proteins, or antibodies as drugs has a very high probability of running afoul of our patents. From a commercial point of view, they are severely constrained - and far more than they realize."

- Dr. William A. Haseltine, Chairman and CEO, Human Genome Sciences¹⁹

(For historical view of human gene patenting and genomics, please see *RAFI Communiqué*, "The Patenting of Human Genetic Material, January/ February 1994. See also, "Gene Boutiques Stake Claim to Human Genome," May/June 1994 www.rafi.org).

Let's Make a Deal:
Landmark Alliances between Big Pharma and
Genomics Partners

Value dation

Year	Deal Makers	Value \$(US) Million
1993	SmithKline Beecham & HGS	\$125
1997	Monsanto & Millennium	\$343
1998	Bayer and Millennium	\$465
2000	Novartis & Vertex	\$815
2001	Bayer & Curagen	\$1,340

The genomics industry has not reached adolescence, but the time and cost paradigm of gene sequencing has changed dramatically over the past decade. Sequencing costs dropped 100-fold over the last 10 years. Armed with super-computers and sophisticated mathematical algorithms, Celera Genomics boasted that its team of 50 scientists working with 300 sequencing instruments could sequence the human genome faster than the 3,000 scientists associated with the public effort. It took scientists ten years to sequence the first animal genome – *C. elegans* (a nematode worm) from start to finish. By contrast, it took sequencers less than a year to map the larger genome of the *Drosophila* (fruit fly).

It is impossible to rank the top 10 genomics companies, as few have sales and virtually none of them register profits. Several of the "older" and more established genomics companies, are no longer just gene-sequencers and database providers, they are striving to become full-fledged drug makers.

These include, for example, Human Genome Sciences (founded in 1992), Millennium Pharmaceuticals (founded 1993) and Celera Genomics (division of Perkin Elmer). Analysts predict a flurry of mergers between genomics companies as they fight for survival and critical mass. The genomics sector is truly a "feeder" industry - none of the genomics companies would survive without alliances and equity investments from major pharmaceutical corporations.

Animal Veterinary Sector

The top 10 veterinary pharmaceutical companies control 60% of the world market valued at \$13.6 billion in 2000. The total world market for nutritional feed additives is valued at \$4.2 billion, bringing the world-wide "animal health" market to \$17.8 billion.

Top 10 Animal Veterinary Corporations

Company	2000 Sales (US\$) Millions	% of world market
1. Merial (joint venture – Aventis & Merck)	\$1,607	11.8
2. Pfizer	\$1,053	7.7
3. Akzo Nobel (Intervet)	\$1,050	7.7
4. Bayer	\$941	6.9
5. Schering-Plough	\$720	5.3
6. Ft. Dodge	\$680	5.0
7. Elanco	\$669	4.9
8. Novartis	\$599	4.4
9. Pharmacia	\$442	3.3
10. Idexx	\$367	2.7

Based on data provided by Fountain Agricounsel, LLC

Virtually all of the top 10 animal veterinary companies are subsidiaries of major pharmaceutical corporations. According to Fountain Agricounsel, animal health sales were up just 3% in 2000.²² In Europe, epidemics of mad cow disease (BSE) and foot and mouth disease were damaging for companies highly leveraged to cattle and swine product sales. However, companies specializing in diagnostics and vaccines saw revenues increase.

Companion animal sales (domestic pets), in recent years the fastest growing segment of the animal veterinary sector, were flat in 2000.

Ag Biotech: 5 Jumbo Gene Giants + 2

Ag biotech is not a crowded field; a top 10 list is difficult to compile because there simply aren't enough major players. After two decades of fastpaced mergers and acquisitions, five major "Gene Giants" dominate: Pharmacia, Dupont, Syngenta, Aventis and Dow. While some predicted that investors would abandon GM crops and foods as a result of citizen campaigns to reject GMOs, it is premature to write ag biotech's obituary. While pharma giants such as Novartis, AstraZeneca, and Pharmacia have spun-off and divested their agribusiness units, the past year saw German-based agrochemical companies Bayer and BASF each announce major investments in agricultural biotechnology. In July 2001 Bayer announced its intention to acquire Aventis' crop and agrochemical business.²³ Today, seven Gene Giants rank as the world's top seven agrochemical corporations (see charts on page 8 for complete listing). Five of the seven Gene Giants also rank among the world's top 10 seed corporations.

Amidst growing public skepticism, the Gene Giants continue to spin a positive GM outlook and collectively spend millions of dollars in advertising campaigns to convince people that GM foods are safe and necessary to feed the world's growing population. When Clive James of ISAAA (International Service for the Acquisition of Agri-Biotech Applications) released his annual statistics on the commercial plantings of GM crops in 2000, he said:

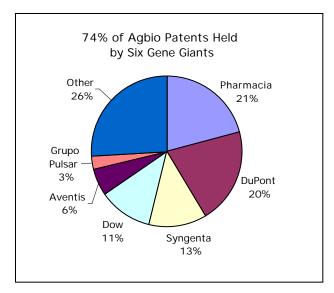
"The fact that legions of farmers [in both industrial and developing countries] around the world have made independent decisions to increase their transgenic crop areas by 25-fold in five years, speaks volumes of the confidence and trust farmers have placed in transgenic crops that can make a vital difference to global food, feed, and fiber security." ²⁴

A closer look at ISAAA's statistics reveals a very different picture. At this point in history, GM crops do *not* demonstrate widespread acceptance by a diverse group of farmers growing diverse food crops worldwide. The statistics show an extraordinarily rapid market introduction, dominated almost exclusively by a single company, in limited geographical areas. Uniformity, industrial agriculture and corporate concentration would best describe the introduction of GM crops over the past five years – not diversity, or food security, or competitive markets. In 2000, commercial GM crops can be summarized by the following four points:

- Four major industrial crop commodities. Soybean, maize, cotton and canola account for virtually all commercial GM crops planted in 2000.
- Three countries. Last year, 98% of all GM crops were grown in the US, Argentina, Canada.
- Two genetic traits. Three-quarters of the area devoted to GM crops last year were engineered for a single trait herbicide tolerance; the rest was B.t. insect resistance or a combination of the two traits.
- One company. Monsanto's (now Pharmacia) GM seed technology accounted for 94% of the total area sown to GM crops last year.²⁵

Access to new biotechnologies is legally restricted by a complex pedigree of patented genes, genetic traits, and enabling technologies.

A study by Gregory Graff at the University of California at Berkeley illustrates the degree to which the Gene Giants control key patents and technology. At the end of 1998 the US Patent and Trademark Office had granted 1,370 ag biotech patents to the



top 30 patent assignees. Three-quarters (74%) of the ag biotech patents (of those awarded to top 30 assignees) were held by six Gene Giants: **Pharmacia** (Monsanto) (287 patents); **DuPont** (279 patents); **Syngenta** (173 patents); **Dow** (157 patents); **Aventis** (77 patents); and **Grupo Pulsar** (38 patents).²⁶

"The outlook [for the GM food industry] is less certain than it was three years ago. The euphoria has gone. Growth has fallen significantly. The industry has overstated the rate of progress and underestimated the resistance of consumers...Acceptability will only come with new products but that seems to be something the industry cannot achieve. The crops that will benefit people [as opposed to farmers] are still three or four years away. The market is not expanding and research budgets are down 5-7% on five years ago. Conceptually, the value [of GM foods] has come down." -Sergey Vasnetsov, Wall Street's leading chemical industry analyst with Lehman Brothers, quoted in *The Guardian*, 28 August 2001²⁷

Global Ranking by Sector based on 2000 sales:

agrochemicals, seeds & pharma

GENE GIANT	Agrochemical	Seed	Pharmaceutical
	Revenues	Revenues	Revenues
	Ranking	Ranking	Ranking
Syngenta	1	3	4 AstraZeneca
			7 Novartis
Pharmacia	2	2	8
(Monsanto)			
Aventis	3	10	5
	for sale		
BASF	4	Not ranked	Sold pharma business for \$6.9 billion
Dupont	5	1	6 11 1 1 : 6 67 01 :11: 0/01
(Pioneer)			Sold pharma business for \$7.8 billion 8/01
Bayer	6	Not ranked	18 – for sale
Dow	7	7	Not Ranked

Source: ETC Group

2000 Sales (US \$million): agrochemicals, seeds & pharma

GENE GIANT	Agrochem	Seed Revenues	Pharmaceutical
	Revenues		Revenues
Syngenta	\$6,100	\$958 pro forma	AstraZeneca \$14,834
		_	Novartis \$12,698
Pharmacia	\$4,100	\$1,600	\$11,177
(Monsanto)			
Aventis	\$3,400	\$267	\$14,809 pro forma
BASF	\$3,400	N/A	Sold Pharma activities for \$6,900 million
Dupont	\$2,500	\$1,938	\$1,630
(Pioneer)			Sold pharma business in 2001
Bayer	\$2,100	N/A	\$5,330
Dow	\$2,100	\$350	N/A

Source: ETC Group

Seed and Agrochemical Sector

Last year RAFI released a comprehensive report, "Who Owns Whom in the Seed Industry." For detailed information about consolidation in the seed industry and a comprehensive list of seed industry subsidiaries, please refer to this document.

Global agrochemical sales fell by 0.6% in 2000, the second year of decline. According to industry

analysts, sagging pesticide sales are a reflection of the global farm crisis – the combination of overproduction and rock bottom commodity prices. Sales in North America, which account for nearly 30% of the world's total agrochemical sales, were up by 2.8%, partly due to increased soybean plantings. Allan Woodburn Associates predicts that the agrochemical market will grow by 1% per year over the next five years.

Top 10 Agrochemical Companies

Company	Agchem Sales (US) Millions,	Share of World Market
	2000	
1. Syngenta (Novartis +	\$6,100	20%
AstraZeneca) pro forma		
2. Pharmacia (Monsanto)	\$4,100	14%
3. Aventis (AgrEvo +Rhone	\$3,400	11%
Poulenc)		
4. BASF (+ Cyanamid)	\$3,400	11%
pro forma		
5. DuPont	\$2,500	8%
6. Bayer	\$2,100	7%
7. Dow AgroSciences	\$2,100	7%
8. Makhteshim-Agan	\$675	2%
9. Sumitomo	\$625	2%
10. FMC	\$575	2%

Source: ETC Group, based on data provided by Allan Woodburn Associates cited in Agrow.

The top 2 companies control 34% of the global agrochemical market; the top 10 control 84%. The world agrochemical market was valued at U.S\$29,880 million in 2000.

Food & Beverage Sector

The food and beverage industry posted recordbreaking levels of consolidation over the past year, according to MergerStat. In the 12 months ended June 1 2001, the value of food industry mergers reached \$69.2 billion. For the five preceding years, the value of all food industry mergers combined totaled only \$50.1 billion.²⁹

According to Paul Rogers, editor of *Prepared Foods*, the food industry's current merger and acquisition spree is not just about acquiring to get bigger. Companies are buying because they need to defend existing brands, buy complimentary brand names, and expand in geographic areas where they are weak. Most importantly, they are positioning themselves to counter consolidation on the supermarket side of the business. In order to maintain shelf space and wield strength with respect to mega-retailers, the food and beverage companies

Top 10 Seed Companies

Company	2000 Seed Sales (US) Millions
1. DuPont (Pioneer) USA	\$1,938
2. Pharmacia (Monsanto) USA	\$1,600
3. Syngenta (Switzerland) pro forma	\$958
4. Groupe Limagrain (France)	\$622
5. Grupo Pulsar (Seminis) Mexico	\$474
6. Advanta (AstraZeneca and	
Cosun)	\$373
UK and Netherlands	
7. Dow (+ Cargill North America)	\$350
USA	estimate
8. KWS AG (Germany)	\$332
9. Delta & Pine Land (USA)	\$301
10. Aventis (France)	\$267

Source: ETC Group

The top 10 seed companies control approximately 30% of the \$24.4 million commercial seed markets worldwide.

Top 10 Food & Beverage Corporations 2001

Top to roou & beverage		
T	Food & Beverage Sales 2000	F&B as % of total sales
Company	US\$ millions	2000
Nestlé (Switzerland)	48,855	100%
Philip Morris (Kraft +		
Nabisco)(USA)	30,907	49%
ConAgra Inc. (+ Intl.	25,386	100%
Home Foods) (USA)		
Unilever (+ Bestfoods)	21,127	48%
(Netherlands/UK)		
Coca-Cola Company	20,458	100%
(USA)		
PepsiCo Inc. (USA)	20,438	100%
IBP Inc. (USA)	16,950	100%
Diageo (UK)	16,651	100%
Mars Inc. (USA)	15,300	?
Groupe Danone (France)	12,308	100%
Source: FTC Group, based on B	Propared Foods	Inly

Source: ETC Group, based on *Prepared Foods*, July, 2001 and *Fortune Global 2000*.

are forced to stake claim to the biggest, best-selling brand names.³⁰ For example, PepsiCo holds 12 brands that each generate over \$1 billion in annual retail sales, and another 5 that each generate over \$500 million. With its acquisition of Quaker Oats Company, Pepsi will move up in the rankings to become one of the world's five largest food & beverage companies.³¹

Even the largest food & beverage firms are dwarfed by the economic muscle of a food retailer like Wal-Mart – which is second only to Exxon Mobil as the world's largest corporation. If the biotech industry gets its way, it will unleash a new generation of biotech products offering perceived health, nutrition and lifestyle benefits for consumers. It remains to be seen when and if food & beverage enterprises and mega-retailers will buy into biotech.

Global Grocery Retailers

- The leading 32 global grocery retailers account for US \$949 billion in total retail sales in 1999/2000, of which Wal-Mart accounts for 16%. (The figure is somewhat distorted because some of the retailers especially Wal-Mart have a large element of non-food sales.)³²
- The top 10 retailers account for \$513.7 billion, or 54% of total sales for the top 32 retailers.³³
- The 32 leading grocery retailers account for 34% of the total global food retail market, which is estimated at \$2.8 trillion.³⁴
- It is widely predicted that only a half dozen global food retailers or fewer will ultimately survive current consolidation trends.³⁵
- In the US alone, the top 5 food retailers control 52% of all commodity volume.³⁶
- Over the last five years, the top 3 grocery retailers (Wal-Mart, Carrrefour, Ahold) have collectively accounted for over \$50 billion of global merger and acquisition transactions.³⁷

Top 10 Global Grocery Retailers

Company	Sales (US millions) 2000	Number of countries
Wal-Mart (US)	193,295	10
Carrefour	59,888	22
(France)		
Ahold	49,000	24
(Netherlands)		
Kroger (US)	49,000	1
Metro (Germany)	43,371	21
Target (US)	36,903	1
Albertson's (US)	36,762	1
Rewe (Germany)	34,854	6
Edeka (Germany)	28,894	6
ITM (France)	24,894	9

Source: ETC Group; based on data provided by IGD

Conclusion: Unmentioned Agenda

The United Nations system lost its capacity to monitor multinational corporations 10 years ago with the demise of the UN Centre on Transnational Corporations. The General Assembly should establish a new "UN Centre on Commerce and Technology" with a wider mandate and the necessary resources to address not only corporate power and concentration, but new commercial and technological combinations. In addition, the United Nations Food and Agriculture Organization should be invited by the World Food Summit this November to expand the work of its economic division significantly in order to monitor the specific impacts of multinational enterprises and new technologies on world food security. FAO should also study the crisis facing the public sector agricultural research and extension.

Although the International Food Policy Research Institute (IFPRI – a CGIAR Center headquartered in Washington, DC) has attempted to claim policy and economic analysis as its own, its new, draft reports on food security virtually ignore the critical issues of ownership and control with respect to food security. This is the *real* "Unfinished Agenda" for CSOs and policymakers meeting in Bonn, Germany (4-6 September 2001).

At the national level, governments should review their own policies and mechanisms to regulate corporate mergers and acquisitions to include public/private alliances and cross-sectoral relationships in technologies and industry.

¹ Thomson Financial Services, "M&A in 2000: Fast Start...Fading Finale," 3 January 2001, On the internet: www.tfsd.com

² UNDP, "Making New Technologies Work for Human Development," Human Development Report 2001, New York, Oxford University Press, p. 19.

³ Anderson, S. and J. Cavanagh, *Top 200: The Rise of Corporate Global Power*, Institute for Policy Studies, 4 December 2000.

⁴ According to Fortune's Global 500, (*Fortune*, July 23, 2001), combined sales of the world's top 200 corporations in 2000 were \$ 9,487 billion. The world's gross national income was \$29,995 billion – according to the World Bank's 2001 World Development Indicators. The top 200 corporations employed 28,384,429 people in 2000. The International Labour Organization's estimate of the world's work force for 2000 is 2,957,744,000 – or almost 3 billion. Source: Personal communication with Claire Harasty, World Employment Report, Employment Strategy Dept., International Labour Organisation, Geneva. 1 August 2001.

⁵ According to Fortune's Global 500, (*Fortune*, July 23, 2001), combined sales of the world's top 500 corporations in 2000 were \$14,065 billion. The world's 500 largest corporations employed 47,225,289 people in 2000. That amounts to 1.59% of the world's total labour force for 2000.

⁶ Hjelt, P. "The World's Largest Corporations," Fortune, July 23, 2001, p. 144.

⁷ UNDP, Human Development Report 2001, p. 3.

⁸ Pear, Robert. "Spending on Prescription Drugs Increases by Almost 19 Percent," New York Times, May 8, 2001, p. 1.

⁹ Pear, Robert. *New York Times*, May 8, 2001. The increase in spending was due not only to the increased cost of drugs, but also the industry's aggressive direct-to-consumer marketing which resulted in a greater volume of prescriptions written for more expensive drugs.

¹⁰ Henry, Celia. "Pharmacogenomics," *C&EN*, August 13, 2001, p. 38.

¹¹ Lahteenmaki, R. and Liz Fletcher, "Public Biotech 2000 – the numbers," *Nature Biotechnology*, May 2001, Vol. 19, p. 407-412. *Nature Biotechnology's* definition of a biotech company is broad: it focuses on companies whose future business will rely heavily on research and development in the life science arena. The list includes genomics companies, but it excludes major pharmaceutical corporations.

¹² Lahteenmaki, R. and Liz Fletcher, "Public Biotech 2000 – the numbers," *Nature Biotechnology*, May 2001, Vol. 19, p. 407-412.

¹³ Morrison, Christopher. "Financing falters, biotechnology shares deflate in 2001," *Nature Biotechnology*, May 2001, Volume 19, p. 393-394.

¹⁴ Enriques, J. and Ray Goldberg, "Transforming Life, Transforming Business: The Life-Science Revolution," *Harvard Business Review*, March-April 2000, p. 102.

¹⁵ To see recent list of best-selling biotech products, see: Van Brunt, Jennifer, "Co-Co Deals: Recipe for Sweet Success," *Signals Magazine*, 3 August 2001, www.recap.com/signalsmag.nsf

¹⁶ Lahteenmaki, R. and Liz Fletcher, "Public Biotech 2000 – the numbers," *Nature Biotechnology*, May 2001, Vol. 19, p. 412. ¹⁷ *Nature*, "The Human Genome," 15 February 2001.

¹⁸ RAFI Genotypes, "Decodeing the Clinton/Blair Announcement," 26 March 2000. On the internet: www.rafi.org

¹⁹ Fisher, Lawrence. 'The Race to Cash in on the Genetic Code,' New York Times, August 29, 1999.

²⁰ International Human Genome Sequencing Consortium, "Initial sequencing and analysis of the human genome," *Nature*, Vol. 409, 15 February 2001, p. 914.

²¹ Venter, Craig J., "Genomics: From Microbes to Man," 2000 Sir Crawford Memorial Lecture, Published by the CGIAR Secretariat, March 2001.

²² As cited in Smith, Rod. "Animal health leadership changes dramatically from 1999," *Feedstuffs*, 23 April 2001.

²³ Bayer News Release, "Bayer Aims to Acquire Aventis Crop Science," July 10, 2001. www.bayer.com

²⁴ ISAAA News Release, 12/21/00.

²⁵ Monsanto, "Monsanto Reports Pro Forma Fourth-Quarter 2000 Earnings," 12 February 2001. (www.monsanto.com) Monsanto claims that its biotech traits were planted on 103 million acres in 2000. This is equivalent to 94% of the total worldwide area sown to commercial GM seeds in 2000, according to ISAAA (109.2 million acres or 44.2 million hectares).

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²⁶ RAFI analysis of patents, 9 February 2001. The original patent breakdown by company for top 30 patent assignees is presented in Gregory Graff, dissertation, Department of Agricultural & Resource Economics, U.C. Berkeley, forthcoming, 2001. http://are.berkeley.edu/~ggraft/IPCM-background.html

²⁷ Vidal, John. "Global GM market starts to wilt," *The Guardian*, 28 August 2001.

²⁸ Allan Woodburn Associates, "Agrochemicals-Executive Review," no date.

²⁹ Rogers, Paul. "Deal a Meal," *Prepared Foods*, July 2001, http://www.preparedfoods.com Note: the M&A activity monitored by MergerStat tracks only deals involving at least one US-based partner. The total value of global M&A is much higher.

³⁰ Rogers, Paul. "Deal a Meal," *Prepared Foods*, July 2001, http://www.preparedfoods.com

³¹ PR Newswire, "PepsiCo Shareholders Approve Plan to Merge with Quaker Oats Company," 1 May 2001.

³² IGD Research, Data for 1999/2000, "Who Are Today's Global Retailers?" IGD is the Institute of Grocery Distribution, based in the UK.

³³ IGD Research.

³⁴ IGD Research.

³⁵ Killgren, L. "EURO MARKETS: Supermarkets still walking down the aisle: In the quest for scale some food retailers will be left on the shelf." *Financial Times*, 22 December 1999. See also, Anonymous, "Just Five by 2002 as pace of consolidation quickens," *Food Week*, October 16, 2000, p. 1.

³⁶ Behind the Power of Global Power Brands, American Demographics, October, 2000, p. s18.

³⁷ IGD web site: <u>www.igd.com</u>