CHAPTER 9
GLOBAL FOOD REGIME: IMPLICATIONS FOR FOOD SECURITY

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"There is no such thing as an apolitical food problem"
– Amartya Sen, *The Food Problem: Theory and Policy*

THE POLITICS OF FOOD AND AGRICULTURE has been central to post-Second World War economics. This is reflected in tensions at all levels: from local communities to nations, from regions to the international arena, and from local intermediaries to transnational corporations. As is well known, the worst affected are the people of the developing world who struggle to eke out a living under a changing global order: first the Cold War era and the United States food aid policy towards the "Third World", then the age of neo-liberal trade politics, and now the regime of global imperialism and capital accumulation through encroachment and dispossession (Patnaik 2007, Harvey 2003).

Neo-liberalism and global imperialism generally strengthen the interests of large private property, and of businesses, multinational corporations and financial capital as a whole, largely at the expense of the masses, particularly in the developing countries. This chapter seeks to address the concerns predicated on the above-noted understanding through a close examination of the current global food regime. It starts with some background on the pre- and post-Second World War political economy of food. The second section offers an overview of the corporate global food regime. This is followed by an examination of the political economy of world food aid. The fourth section elucidates the implications of the current global food regime for developing countries with particular reference to Africa. The concluding section stresses the urgent need for a policy that will put the leash on the expansion of the corporate food regime in developing countries.

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POLITICAL ECONOMY OF FOOD – PRE- AND POST-SECOND WORLD WAR

In the early nineteenth century, the world's population was around 1 billion. By the 1950s, it had increased almost three-fold, and by 2011 it crossed the 7-billion mark. The majority of these people, 5.80 billion, live in the developing nations, with a total of 6.677 billion living in the less and least developed nations combined (UNFPA 2012), as seen in Table 1. Many of these people do not have enough food for proper health and are therefore not able to work optimally, or contribute actively to the development of their nations.

Table 1: World Population by Region

Region	Population (in billions)
World Total	7.052
More Developed Nations	1.244
Less Developed Nations	5.807
Least Developed Nations	.870

Source: UNFPA *Report on the State of World Population* 2012.

According to the United Nations Food and Agriculture Organisation (FAO 1996), food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

The consumption of cereals for both food and industrial use is "anticipated to increase by 1 per cent" on an annual basis, keeping largely in step with the current pace of world population growth, according to a 2012 FAO report.[2] Table 2 shows that while cereal production at the world level is enough to cater for utilisation,[3] developing countries (at the regional level) are plagued by food deficits. It also illustrates a relative neglect of agriculture. For example, although gross capital formation (GCF) in agriculture in

2 FAO (2012). Report on Crop Prospects and Food Situation, http://www.fao.org/docrep/015/al985e/al985e00.pdf.

3 Utilisation is related to food utilisation, feed utilisation, cereal for industrial use and for bio-fuels production.

developing countries tripled between 1980 and 2007 to US$355 billion, agriculture's share in total GCF fell from 17 per cent to less than 10 per cent of the total during the period. Likewise, official development assistance (ODA) in agriculture to developing countries – as gross and as share of total ODA – has been declining since its peak in 1990.

Table 2: World Cereal Production and Utilisation (million tons)

Region/Year		2010–11	2011–12 (estimate)	2012–13 (forecast)
Production	World	2254.5	2344.3	2419.1
	Developing Countries	1315.8	1344.1	1371.4
	Developed Countries	938.7	1000.2	1047.7
Utilisation	World	2277.4	2326.9	2376.3
	Developing Countries	1429.8	1468.4	1492.3
	Developed Countries	847.5	858.4	884.0

Source: FAO *Report on Crop Prospects and Food situation* 2012.

The lack of capital formation in agriculture in developing countries is one of the factors contributing to poverty and hunger. The UN Food and Agriculture Organisation's 2010 report, "State of Food Insecurity in the World", states that more than one billion people were undernourished in 2010, and the Global Hunger Index categorised 65 countries as being in "serious", "alarming", or "extremely alarming" danger of food shortages, partly because of rising food prices in recent years. A 2012 FAO report identifies 35 countries in Africa, Asia and Latin America as being in severe need of external assistance for food.[4]

While recent decades have witnessed major restructuring of the global food economy, the question remains: Is it a way forward or is the world plunging into a new crisis? The new world political and economic order emerged as a corollary to the events and situation both before and after the Second World War. The Great Depression of the 1930s plunged the world into a severe and prolonged economic crisis, as a result of which the veracity of Say's Law (theory of markets that "supply creates its own demand") was questioned. To overcome the crisis, nation states decided to protect their national economic sectors based on Keynesian macro-economic policy. After the Second World War, the dominance of the United Kingdom and the pound sterling diminished and the United States emerged as a world leader along with the US dollar as a reserve currency for trade. The process of global restructuring (both political and economic) began when war-affected countries were faced with the task of rebuilding their economies (McMichael 1994).

Of the post-war events that affected the global economy, the dollar shortage and the failure of the Bretton Woods monetary system are perhaps the most significant. The US dollar was the international reserve currency due to its relationship with bullion markets and the shortage was catalysed by US deficits. The failure of the Bretton Woods system during the 1970s, as a result of the United States suspending the convertibility of dollars into gold, led to rampant violation of the exchange rate system, and, in turn, economic restructuring all over the world. The first "oil shock" (Arab oil embargo) was felt in 1973 when the then OAPEC (Organisation of Arab Petrol Exporting Countries) sharply hiked petroleum prices. This had two outcomes: it upset the balance of payments situation in developing countries; and OPEC (then consisting of 12 countries) invested these petro-dollars in American and European banks, which in turn used the invested money to provide loans to developing countries. In doing so they set conditions for the borrowing nations to liberalise their economies and open up their ports to goods from the developed world: a solution to the industrial sluggishness in 1980s' America and Europe.

In the 1970s and 1980s almost the entire developing world adopted the idea of liberalisation in the name of individual freedom. The free market approach was championed by a handful of world leaders at the time, primarily the US Federal Reserve chief, Paul Volcker, the British Prime Minister Margaret Thatcher, the US President Ronald Reagan, and the economists of the Chicago School, the most important being Professor Milton Friedman (Harvey 2005). The much-talked-about concept of individual freedom amounted to a system that promoted freedom of the market and of trade: in other words neo-liberalism. A staunch critic of neo-liberalism, David Harvey, describes it as a theory of political economic practices, which

4 The countries are as follows: Burkina Faso, Chad, Gambia, Mali, Mauritania, Niger, Zimbabwe, Djibouti, Eritrea, Liberia, Sierra Leone, Burundi, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Senegal, Somalia, South Sudan, Sudan, Morocco, Iraq, Democratic People's Republic of Korea, Yemen, Afghanistan, Kyrgyzstan, Syrian Arab Republic and Haiti.

> proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices (Harvey 2005: 2).

CORPORATISATION OF THE WORLD FOOD SYSTEM

The capitalist system in the developed world, which originally advocated competition as the predominant form of market relations in nineteenth century Britain and elsewhere, had more or less transcended its classical competitive stage by the time of the Second World War (Baran & Sweezy 1966). By the 1950s this was quite apparent in developed nations, where there has been vigorous support for a corporatised market system for the production, promotion and trade of agricultural commodities. At the same time, developed nations pressed developing countries to open up their markets to corporations for food commodity trading through negotiations under the General Agreement on Tariffs and Trade (GATT), and subsequently under the World Trade Organisation (WTO). These corporations are large-scale enterprises producing and trading a significant share of output in the food commodity market, possibly even controlling a share of the world agricultural commodity trade. They are able to control the volume of production, commodity prices, and the types and amounts of investment (Baran & Sweezy 1966). The present situation could be likened to agricultural production and trade during the colonial era, and described as a form of imperialism under modern capitalism, or "monopoly capitalism" (Lenin 1917).

The new world food regime seems to be monopolised by corporations controlling food commodity production, prices, trade, technology and investment. To support a market-friendly food regime, restrictions have been imposed under WTO negotiations. These restrictions limit the freedom of nations to impose protective tariffs and quota norms in a number of ways: they remove domestic subsidies protecting producers and consumers; they decrease budgetary allocations for the development projects in the name of fiscal consolidation and improved market efficiency; and they encourage exports, with special emphasis on the primary sector. Under such a regime, national economies have been completely opened up to international trade and investment flows and to economic reforms, including the World Bank's market-led agrarian reform. The inclusion of agriculture under the auspices of the WTO was intended to renew pressure on developing countries to specialise according to the needs of the developed world and change their cropping patterns in order to keep the shelves of developed countries filled, regardless of their own food security (Patnaik 2005, Borras Jr. & Franco 2011). This opening up of trade boundaries has created competition in the primary commodities trade among developing nations. The result has been deterioration of the terms of trade, since almost all developing countries produce and export primary commodities, whereas their imports consist of a whole range of manufactured products as well as technology.

In many respects the recent trends provide a sense of *déjà vu*. The Industrial Revolution of the eighteenth and nineteenth centuries exerted pressure on traditional agriculture to become more mechanised and market-oriented to meet the demands of the new industrial towns. The colonised nations were forced to grow export crops for the metropolitan economies and large tracts of land in the developing world were placed under coffee, cocoa, sugar, tea and banana cultivation. In those days, much of the best land was under export crops. At the same time, the trading of food products increased from the colonies to the metropolitan economies. Land for food crops came under pressure and this often led to land degradation. Due to industrial pressure, agriculture in the West was also under pressure. Mono-cropping was for many years the dominant agricultural practice in Industrial Revolution Europe. However, despite the huge subsidies, small-scale farmers were unable to make a viable living as their land was being sold to, or forcefully taken away by larger entities, often industrial companies. Even today, agriculture in Europe survives only because of subsidies. In Britain, for example, the collapse of farming has been dramatic: between 1939 and 2000, the number of farms fell by two-thirds (from 500 000 to almost 158 000) and farm income by 72 per cent. In 1999 alone, 200 000 farmers gave up agriculture in Europe (Madeley 2002).

While trade in food products after the Second World War was nominal it grew rapidly in the last two decades of the twentieth century. The increased pace was due to the successive rounds of trade negotiations and market liberalisation, starting with the General Agreement on Tariffs and Trade (GATT) in 1947. Initially, however, agricultural trade was not included under the GATT system; discussion about this sector took place for the first time in the Uruguay round of negotiations between 1986 and 1994. This phase of negotiations resulted in the 1995 establishment of the World Trade Organisation. The WTO agreement sought to bring order and fair competition to the highly distorted sector of world trade through the

establishment of a fair and market-oriented agricultural trading sector. Its ostensible objective was to facilitate and regulate free trade across the world. In effect, however, the agricultural sector has, after several rounds of talks under the WTO, emerged as the biggest bone of contention among the nations.

The primary negotiation point has been the subsidies provided by developed countries to their farmers. Many economists are of the view that subsidisation of farmers in developed countries is a part of the new assault by developed countries, which are forcibly trying to scuttle similar subsidies in developing countries (Patnaik 1999). Table 3 shows government support for agricultural producers in the Organisation for Economic Cooperation and Development (OECD) countries. It clearly reflects that these subsidies are the highest in the world. The total subsidy for OECD countries in 1986 was US$222 553.9 million, which increased to US$228 587.8 million in 1994, and then decreased marginally to US$227 265 million in 2010. Hence, subsidies in OECD countries have remained at almost the 2002 level. Subsidies to agricultural producers in the European Union have increased by a substantial amount during the period, in flagrant disregard of the WTO precondition for trade. The amount of support to EU agricultural producers in 1986 was US$84 995.2 million, increased to US$92 096.5 in 2002 and further to US$101 364.7 million in 2010. Looking at the other OECD members, Switzerland, Mexico, Korea, Japan, Canada, Turkey, Norway and Korea have all increased support to producers in agriculture. A minority of OECD countries – the United States, New Zealand, Chile and Australia – have decreased support in absolute dollar terms.

Table 3: OECD countries – Support for Producers in Agriculture (million US dollars)

Country	1986	1990	1994	1998	2002	2005	2006	2007	2008	2009	2010
OECD	222553.9	250585.6	273168.3	252086.3	228587.8	270285.1	258089.6	251981	261074.1	250522.9	227265.1
Australia	1519	1338.7	1626.5	918.2	895.3	1119.5	1277.5	1860.4	1622.8	990.9	952.3
Canada	5999.4	6249.1	3749	3249.2	4748.8	6331.3	6599.6	6268.9	5576.5	6721.9	7430.8
Chile				567.5	409	319.7	298	497.2	284.5	383.8	302.1
European Union	84995.2	105112	105901.4	108622.4	92096.5	124438.5	124400.7	124354.1	132114.8	119404.6	101364.7
Iceland	158.8	177	126.2	182.7	156.1	253.9	234.5	229.7	177.3	124.8	119.5
Israel				703	568.7	493.9	410.1	99.3	1089.3	800.3	707.1
Japan	46069.3	42702.7	72477.6	45755.4	43742.9	44429.8	39430.9	34800.1	42829.1	44784.4	52888.3
Korea	9417.8	19155.6	22062.9	12427.5	16048.7	22047.2	23124.3	22833.8	16842.5	17619.4	17461.1
Mexico	549.8	4303.1	7004.9	5190.6	9227	4984.1	5576.1	6122.6	6312.6	5572.1	6218.6
New Zealand	788.5	94.9	56.1	41.9	17.9	128.5	84.8	96.8	69.2	50.3	75.9
Norway	2397.3	3484.5	2908.3	2797.6	2728.9	3038.9	2994.2	2965.4	3602.3	3366.2	3634.6
Switzerland	4401.7	5790.7	5869.8	5157.9	4775.6	5467.8	5129.1	4142.7	5569.7	5847	5391.1
Turkey	3143.1	7561.6	6136.3	12180.8	7297.3	18357.5	20084	19414.4	20407.1	20170	22138.3
United States	38326.5	31265.7	29059.1	46485.3	40332.2	40626.2	30496.3	33174.1	30477.5	31423.2	25551.5

Source: OECD Agricultural Statistics *Producer support estimates by country* 2011.

If these subsidies are calculated as a percentage of gross farm receipts (see Table 4) then the total OECD support to agricultural producers in 2003 was 29 per cent of the gross farm receipts. These OECD subsidies are many times higher than the support that farmers get almost everywhere else in the rest of the world. In 2010, the extent of support to OECD countries was reduced to 18 per cent (see Table 4). This is still many times higher than producers in non-OECD countries (which are almost all either categorised as less developed or least developed) receive as a percentage of gross farm receipts.

Table 4: Estimates of Support for Producers (subsidies) as a Percentage of Gross Farm Receipts

Country	2003	2004	2005	2006	2007	2008	2009	2010
Australia	4	3	4	5	5	4	3	2
Canada	24	20	21	21	16	13	17	18
Chile	5	5	5	4	6	3	4	3
Iceland	65	66	67	65	55	52	48	45
Japan	57	56	54	52	46	48	48	50
Korea	57	61	60	59	57	45	51	45
Mexico	19	12	13	13	13	12	13	12
New Zealand	1	1	1	1	1	1	0	1
Norway	71	66	66	64	55	59	61	61
Switzerland	69	69	66	65	49	54	60	54
Turkey	32	34	37	38	31	25	29	28
United States	15	16	15	11	10	9	10	7
EU27	34	33	31	29	23	22	24	20
OECD – Total	29	29	28	26	21	20	22	18

Source: OECD Agricultural Statistics *Producer support estimates by country* 2011.

As is generally acknowledged, agriculture is the mainstay of a majority of the population of developing countries, providing subsistence and stability to their rural communities. In the colonial era, many of these countries not only catered for the livelihood of their own populations, but also for urbanised societies. For example, the development of Western Europe and North America depended in varying degrees on resources that were exported

on highly unfavourable terms, and in some instances forcibly extorted, from other countries (Thomas 1997, Patnaik 2007). Agricultural communities of the developing world today face several new threats apart from overpopulation and high unemployment rates. These are (1) decreasing government investment in agriculture in favour of manufacturing; (2) diversion of agricultural land to non-agricultural use, especially industries; (3) diversion of land from food grain production to cash crop production to cater for the demand for luxuries in urban societies; (4) contract farming, where land is being leased out by transnational corporations to individual farmers, thereby changing land and labour relations, production relations and class relations; (5) corporations are engaging in greater capital accumulation in agriculture, and destroying agricultural communities by inciting conflict in many parts of the world; and (6) the monetisation of agriculture.

The past few years have witnessed an upsurge in foreign direct investment (FDI) in agriculture, especially for direct farming under which the multi-national corporations purchase or lease land for cultivation, agri-business, and mergers and acquisitions. The reason for this has been the slew of export promotion initiatives and an increased focus on the production of cash crops for higher profits from consumption-driven buyers in urban societies. The rapid increase in bio-fuel production around the globe, for instance, has gained considerable support from governments in Brazil, the US and the EU and resulted in massive FDI inflows in developing countries to grow sugarcane, grains (such as maize) and oilseeds (such as soya beans), as well as non-food crops such as Jatropha and its flowers.

Tables 5 and 6 illustrate a marked increase in both FDI inflow and inward stocks in developing economies during the period 1989–91 to 2005–07. FDI inflow and inward stocks in agriculture, forestry and fishing, food and beverages increased four-fold or more (across different regions) during the period. Looking at developing countries by region shows that, until 2007, the largest total FDI inflow was registered in Asia (78 per cent), followed by Latin America and the Caribbean, and then Africa at 7 per cent. However, data trends in the past few years point to large-scale land acquisition in Africa through foreign direct investment. An annual analysis of foreign direct investment in agriculture across the world shows that in 2000 the FDI inflow was US$1 601 million, which increased to US$5 450 million in 2007. Similarly, in 2007, the FDI for food processing increased to US$54 298 million compared to US$15 337 million in 2000. Comparing these FDI inflows with gross capital formation in the developing

regions shows that capital formation has been decreasing despite the massive increase in FDI. This again raises the question of the usefulness of FDI in the agricultural sector.

Table 5: Estimated FDI in Agriculture, Forestry and Fishing, Food and Beverages (billions of US dollars)

Regions	FDI inflows		FDI inward stock	
	1989–91	2005–2007	1990	2007
Agriculture, Forestry and Fishing				
World	0.6	3.3	8.0	32.0
Developed economies	-0.0	0.0	3.5	11.8
Developing economies	0.6	3.0	4.6	18.0
South east Europe and the CIS	–	0.3	–	2.2
Food and Beverages				
World	7.2	40.2	80.3	450.0
Developed economies	4.8	34.1	69.9	390.7
Developing economies	2.4	5.1	10.4	46.9
South east Europe and the CIS	–	1.4	-0.0	12.4

Source: UNCTAD *World Investment Report* 2009.

Table 6: Inward FDI Stock in Agriculture by Developing Region (as a percentage)

Region	2002	2007
Africa	7	7
Asia	77	78
Latin America and the Caribbean	16	15

Source: UNCTAD *World Investment Report* 2009.

The new global food system is developing into a concentrated market power in agricultural markets, from input providers through producers, to processing and retail (Murphy 2006), with market power having the ongoing ability to affect prices and reduce competition. The emergence of the modern trade system can be traced back to the colonial period – for example, the East India Company established its trade centres in India in the sixteenth century, primarily for agricultural trade. In fact, four of the five firms (Cargill, Continental, Bunge and Louis Dreyfus) that dominate the market in the grain and agricultural input trade today, also held sway a century ago (Murphy 2006). These firms are engaged in trading commodities, processing, packaging, food and other agricultural commodity purchasing, distribution and export. A twentieth-century global economic trend was for firms to purchase and lease agricultural land, entering into direct cultivation and establishing production chains. This practice is accompanied by technical innovation in areas like transportation and communication, which has again made significant changes in production, processing and distribution. All these developments tend to increase market dominance. Several other economic entities or drivers have emerged, like the supermarket culture, which established a foothold in Europe in the second half of the twentieth century (Baran & Sweezy 1966). In the recent past, supermarket chains have consolidated distribution chains and retail markets in most parts of the globe.

Through market power and lobbying (Action Aid 2004), these transnational corporations (TNCs) have captured the market of agricultural input production, such as seeds, pesticides, fertilisers and agricultural chemicals. Table 7 illustrates how TNCs have patented genes for the world's staple foods. Together, the biggest four corporations working in agri-business – DuPont, Syngenta, Monsanto and Mitsui – have taken 3 955 out of 9 027 (about 44 per cent) of the patents on rice, maize, wheat, soybean and sorghum. Of these 3 955 patents, 1 895 (almost 50 per cent) are in the name of DuPont alone. DuPont also possesses 665 (about 67 per cent) out of 999 patents for maize, while, in the case of soybean, the four TNCs together hold 750 out of 947 patents. These figures show that the global food system is in effect controlled by a handful of business giants.

Table 7: Gene Patent Holders on Six Leading Staple Foods

Companies	Rice	Maize	Wheat	Soybean	Potato	Sorghum	Total
DuPont	191	665	539	495	3	2	1895
Syngenta	75	198	665	21	46	15	1020
Monsanto	80	136	290	229	32	--	767
Mitsui	267	--	1	5	--	--	273
Total	613	999	1495	750	81	17	3955

Source: Madeley 2002.

While the commercial seed market has witnessed a boom in the West, a majority of farmers in developing countries like India continue to plant seeds saved from previous harvests. In India, saved seeds even now represent 70 per cent of the total national market, whereas in the United States, even as far back as the 1960s, saved seeds comprised less than 5 per cent of the maize sown (Philip 2009). The pro-corporate lobby's argument is that the seeds produced by the corporations are highly productive, so the farmers should use them. But if the farmers rely on such seeds in the absence of government support, they would be dependent on the corporate giants and market volatility. Moreover, since industrial agriculture depends largely on commercial seeds, there is a high probability that the hybrids spawn sterile seeds.

Table 8 shows that three multinational corporations – Monsanto, DuPont and Syngenta – are the market leaders in the commercial seed market. Of these, US-based Monsanto owns 17 per cent of the global commercial market. It is notable that the top 10 agri-business companies control 50 per cent of the world commercial seed market, while the top three alone have acquired 35 per cent of the total stakes (Mulle & Ruppanner 2010).

Table 8: Global Seed Market – Market Share of Top 10 Corporations

Corporations	Market share of the global seed market (per cent)
Monsanto (USA)	35
DuPont (USA)	22
Syngenta (Switzerland)	13
Groupe Limagrain (France)	8
Land O'Lakes (USA)	7
KWS AG (Germany)	5
Bayer Corp Science (Germany)	4
Sakata (Japan)	3
DLF Trifolium (Denmark)	2
Takii (Japan)	2

Source: Mulle, Emmanuel Dalle and Violette Ruppanner 2010. "Exploring the Global Food Supply Chain: Markets, Companies, Systems". Companion Publication to *Seeds of Hunger, Backgrounder* No. 2 in the THREAD Series: 3.

According to a country-specific study, the Indian seed market is worth US$1.1 billion: it is the sixth largest in the world, and it accounts for 3.7 per cent of the global seed market. The share of saved seeds is 70 per cent of the total seed market in the country, with 26 per cent distributed by public sector seed companies and the remaining 4 per cent sold by private companies like Monsanto and Syngenta (Verma 2010, Shrivastav 2009). The study reveals that the seed market in South Africa is worth US$300 million and its market is twentieth in the world, while it ranks eigth in terms of genetically modified (GM) seeds. As far as other African countries are concerned, 90 per cent of the seeds used by farmers are saved seeds (Mulle & Ruppanner 2010). The seed market in Brazil accounts for 7.6 per cent of the world market, with an estimated value of US$1.9 billion in 2007, the fourth largest in the world. Almost 58 per cent (of which Monsanto alone accounts for 20 per cent) of the total corn seed market is owned by multinational corporations, 21 per cent is supplied by Brazilian companies and the remaining 21 per cent is in the hands of public institutions (Mulle & Ruppanner 2010). Brazil is one of the biggest soybean producer countries, where MNCs own 28 per cent of the seed market and public research institutions 49 per cent (Angela, Julian & Josh 2007). In the same way, 10 multinational corporations control about 82 per cent of the global pesticide market (see Table 9) and among them the five

biggest corporations (Syngenta, Bayer, Monsanto, Dow and BASF) share 63 per cent of the global market (Mulle & Ruppanner 2010).

Table 9: Pesticides – Market Share of Top 10 Corporations

Corporations	Market share of the global pesticides market (per cent)
Syngenta (Switzerland)	18
Bayer (Germany)	17
Monsanto (USA)	10
Dow AgroScience (USA)	9
BASF (Germany)	9
DuPont (USA)	5
Makhteshim Agan (Israel)	4
Nufarm (Australia)	4
Sumitoma Chemical (Japan)	4
Aryata Lifescience (Japan)	2
Others	18

Source: Mulle and Ruppanner 2010.

The transnational corporations already reap rich profits in agricultural trade, processing and retailing in the developed world. Now, they are trying to control agricultural activities in the developing world by lobbying governments and through WTO legislation. Cargill is a transnational agri-business that provides food, agricultural and risk-management products. Established in 1865, it employs 158 000 people operating in 66 countries. The company's 2011 annual financial report states that during the 2011 fiscal year, Cargill invested more than US $3 billion in acquisitions and new or expanded facilities in developed and emerging markets. The US-based company acquired the AWB commodity management business in Australia, Unilever's shelf-stable condiments business in Brazil, Indonesian starch and sweetener maker PT Sorini Agro Asia Corporindo Tbk, Royal Nedalco's potable alcohol operations in Europe, a Chinese port facility, a Canadian grain facility and a US corn wet mill ethanol facility. Cargill is also building new or expanded plants in several countries, including animal-feed mills in Russia and Vietnam, poultry processing operations in Thailand, a sweetener facility in China and food innovation centres in Brazil and the US.

As shown in Table 10, Cargill earned US$2.34 billion for the full fiscal year 2007, a 36 per cent increase from US$1.73 billion for 2006. Its revenues

rose 17 per cent to US$88.3 billion for 2007 in comparison to 2006. For the fiscal year of 2008, Cargill earned US$3.64 billion from continuing operations, a 55 per cent increase from the previous year. A US$310 million gain on the sale of discontinued operations in the fourth quarter brought it net earnings of US$3.95 billion in 2008. The company's revenues for the full year rose 36 per cent to US$120.4 billion. In 2009, Cargill earned US$3.33 billion, a 16 per cent decrease from the fiscal year 2008. Its revenues for the full year decreased 3 per cent to US$116.6 billion. For the full fiscal year 2010, Cargill earned US$2.6 billion, a 22 per cent decrease from 2009. Revenues for the same year were US$107.9 billion compared with US$116.6 billion a year ago. In 2011, Cargill's net income increased to US$2.69 billion, while consolidated revenues for the fiscal year were US$119.5 billion, 11 per cent up from the previous year.

Table 10: Agricultural Trade, Processing and Retailing – Annual Net Income of Top Four Firms (in billion US dollars)

Corporations	2007	2008	2009	2010	2011
Cargill*	2.34	3.64	3.33	2.6	2.69
Monsanto**	0.99	2.02	2.1	1.1	1.6
Syngenta***	1.1	1.38	1.37	1.39	1.66
Bunge****	0.77	1.06	0.36	2.35	0.94

Source: * Cargill Reports of Fourth Quarter and Financial Earnings, 2007; 2008; 2009; 2010 and 2011. ** Monsanto Annual Report, 2007; 2008; 2009; 2010; 2011. *** Syngenta Annual Report, 2008; 2009; 2010 and 2011. **** Bunge Annual Report, 2007; 2008; 2009; 2010 and 2011.

The US-based company Monsanto pursued an acquisition and investment strategy from 1996 that enabled it to capture the global seed market. It now controls 41 per cent of the global market in commercial maize seed and 25 per cent of the global soybean seed market. Patented technologies played a key role in this rapid acquisition. A 2010 study indicates that Monsanto made more than 50 acquisitions focused on seed companies (Mulle & Ruppanner 2010). It has created a near monopoly on commercial transgenic traits, which has given the corporation leverage to vertically integrate industries through acquisitions, joint ventures and strategic alliances. According to a study by ETC Group (2008), Monsanto's seed sales in 2007 were worth US$4 964 million, which accounted for almost 23 per cent of the global seed market. As shown in Table 11, the company's net revenue from its

global operations in the same year was US$8.56 billion. In 2010, the revenue increased to US$11.50 billion and in 2011 it was US $11.82 billion.

Table 11: Agricultural Trade, Processing and Retailing – Annual Revenue of Top Five Firms (in billion US dollars)

Corporations	2007	2008	2009	2010	2011
Cargill*	88.3	120.4	116.6	107.9	119.5
Monsanto**	8.56	11.36	11.72	11.50	11.82
DuPont***	29.4	30.5	26.1	31.5	38.0
Syngenta****	9.24	11.62	10.99	11.64	13.3
Bunge*****	37.84	52.57	41.92	45.70	58.74
Total	173.34	226.45	207.33	208.24	241.36

Source: * Cargill Reports of Fourth Quarter and Financial Earnings, 2007; 2008; 2009; 2010 and 2011. ** Monsanto Annual Report, 2007; 2008; 2009; 2010; 2011. *** Dupont Annual Review, 2010 and 2011. **** Syngenta Annual Report, 2008; 2009; 2010 and 2011. ***** Bunge Annual Report, 2007; 2008; 2009; 2010 and 2011.

DuPont is another giant corporation involved in the global food and seed market. The American company operates in more than 35 countries around the globe employing 9 500 scientists and engineers (DuPont Annual Review 2011). In 2011, its sales were up 20 per cent in comparison to 2010, and sales in developing markets grew 27 per cent in 2011. In 2007, DuPont's net sales amounted to US$29.4 billion, which increased to US$31.5 billion in 2010, and to US$38.0 billion in 2011 (see Table 11). The company was ranked second in global seed sales in 2007. Its seed sales were US$3.3 billion, which accounted for 15 per cent of the global proprietary seed market (DuPont Annual Review 2011).

Syngenta, a Switzerland-based agri-business transnational corporation, is the third largest corporation operating in the seed market. With sales worth US$2.01 billion in 2008, this corporation captured 9 per cent of the global seed market (ETC Group 2008). For agrochemical sales, the company was ranked second, capturing 19 per cent of the world agro-chemical market, worth US$7.28 billion in 2007. Syngenta's total revenue in 2010 was US $11.64 billion, which increased to US$13.3 billion in 2011 (Syngenta Annual Review 2010, 2011).

Bunge is one of the largest globally operating corporations operating in three divisions: agri-business, fertilisers and food products. Its agri-business division is involved in the purchase, storage, transport, processing and sale of agricultural commodities and commodity products. The company's agri-business operations and assets are primarily located in North and South America, Europe, China and India (Bunge Annual Report 2011). In 2007, the company's operating profits increased by 162 per cent and net income increased by 49 per cent (US$37.84 billion) compared to 2006. The company's annual reports show that its income increased from US$45.70 billion in 2010 to US$58.36 billion in 2011 (see Table 11).

POLITICAL ECONOMY OF WORLD FOOD AID

After the Second World War, the Third World countries suffered acute food shortages since, historically, they had been colonised by the Western world and had to cope with the problem of reconstruction and reorganisation with their new-found independence. At the same time, the Cold War split the world between the United States and what was then the Union of Soviet Socialist Republics. The Cold War crisis prolonged the post-war food regime. The two superpowers were constructing frameworks in which to develop their national economies, part of which included securing food and agricultural products from the developing world.

From 1954, the United States began supporting Third World countries through the US Food Aid programme. Supplying food aid was an experiment aimed at extending free trade into newly independent nations, which helped solve the American surplus wheat problem. The negotiated prices for surplus products, wheat in particular, were low, due to subsidised agriculture. In turn the availability of grains at low prices led to multilateral and bilateral trade agreements between the US and developing countries. While these countries welcomed the subsidised wheat as immediate aid, it also led to the development of capitalist markets in the recipient countries and an increased dependence on food imports.

The Food Aid regime can therefore be viewed as the outcome of the US's increased production of surplus food due to technological and mechanical know-how. The subsidies provided by the US government to its farmers for the purchase of expensive fertilisers, pesticides, herbicides, and genetically modified seeds led to massive surplus production. Many multinational corporations like Monsanto, Cargill, ADM and Daxcon started profiteering through agricultural commodity trading and marketing. With financial backing and the ability to generate capital, corporations such as these were able to develop costly inputs. They could then use their political and industrial weight to push

for the implementation of these inputs and the associated technologies. This process was fully protected and subsidised by the United States. In effect, these big corporations had control over the structures that generated agricultural knowledge. They also patented technologies in the name of intellectual property rights. This control of the technology and knowledge of industrial food production barred other nations from developing technical knowledge and prevented them from producing higher agricultural yields. Owing to the high cost, the developing countries were not able to import the new technologies. Such barriers forced the Third World countries to accept American Food Aid under Public Law 480, known as the Agricultural Trade Development and Assistance Act, passed in 1954. During the Cold War of the 1950s and 1960s, the United States used the Food Aid programme to achieve its objective of dictating foreign policy. At the same time, ironically, the "Food for Peace" (or PL 480) programme had the effect of fomenting Cold War tensions because it led to increased support for the pro-US groups (Garst & Barry 1990).

It has been observed that developing countries, while on the one hand receiving US Food Aid and relying on imports, have on the other hand continued to increase their production of export oriented cash crops, like coffee, banana and flowers, to cater for the Western luxuries market (Garst & Barry 1990). In this way, Food Aid depresses domestic food production and makes countries dependent on foreign aid.

The food crisis in developing countries can be related to the global structure for production and distribution of food grains. It is said that scarcity is always a characteristic of capitalist relations, but its explicit form is historically determined only through the international food order. In effect the prevailing international food order contributes to the widening and deepening of capitalist relations within the world economy. This is done by shifting more of the world population away from direct access to food and towards greater incorporation into global food markets (Friedmann 1982). The increasing importance of markets in the global food chain has led to commodification of food with little care for the masses who were previously engaged in subsistence agricultural production. The post-war international food order therefore occupies a specific place within the dynamics of capitalist accumulation (Friedmann 1982). So, the US Food Aid programme was basically an extension of capitalist relations to the Third World, with the bigger agenda of preparing developing countries for the open flow of goods and capital. This intrinsic part of the project was an extension of commodity relations to the supply of food (Forbel, Henrichs & Kreye 1980).

IMPLICATIONS FOR DEVELOPING COUNTRIES

Post-Second World War Western corporate agriculture and food aid has played a considerable role in determining how agriculture has evolved in many developing countries, particularly in Africa. During the past three decades there have been significant changes in the patterns of agricultural trade, with the European Union emerging in the early 1980s as a the dominant exporter of agricultural products. The EU has, since the early 1980s, become the largest exporter of processed food, the second largest of dairy products and pork, and the third largest of poultry and wheat. This dominance of agricultural trade has come about because of the high level of subsidisation of farming within EU countries. A large proportion, amounting to 40 per cent of the total EU budget, is devoted to the Common Agricultural Policy (CAP) (Fritz 2011). The CAP subsidies have benefited European farmers considerably. Under the EU's Free Trade Agreements (FTAs) developing countries are obliged to open up their markets to absorb European surplus production, but meanwhile farmers in these developing countries do not receive equivalent levels of subsidisation, which means they struggle to compete with the highly subsidised EU produce.

As in the colonial period (during which the British government traded raw materials from its colonies to pay for the industrial revolution), the EU countries now need inputs that are largely produced in the global South, such as soybean and maize, in order to produce dairy products, pork and poultry. Millions of hectares in developing countries are thus devoted to cash crops for export to the EU at the expense of local food production. In effect, the EU's Common Agricultural Policy undermines food security in the global South. Until the mid-1980s the global South was a net exporter of agricultural commodities with a net surplus of more than US$10 billion a year; however this has subsequently turned into a large deficit, which in 2005 amounted to almost US$30 billion (FAO 2006, Fritz 2011). The global South is now a net importer of food. In 2010–11, the total import of cereals around the globe was 275 million tons, of which developing countries imported almost 77 per cent (almost 212 million tons).

This situation is the result of the much-talked-about trade liberalisation and structural adjustment programme imposed by the World Bank and the IMF. Effectively, it has meant the end of developing countries' surplus in agricultural trade. In adopting the structural adjustment programme, developing countries have been forced to cut budgetary expenditure and support for domestic agriculture, and to open domestic markets to food

imports from the West, which in effect means switching over to cash crop production. The major exporting countries are the US, Canada, Australia and the countries of the EU. The importing countries include the 48 least developing countries (LDCs) and 70 low-income food-deficient countries (LIFDCs). More than half of the LIFDCs rely for at least 30 per cent of their total cereal consumption on imports. Some countries, such as Congo, Mauritania, Liberia, Somalia, Côte d'Ivoire, Senegal, Yemen, Georgia, Mongolia, Papua New Guinea and Haiti import more than 50 per cent of their total cereal consumption (FAO 2011, Fritz 2011). The food import bill for LDCs increased from US$9 billion in 2002 to US$24 billion in 2008 (Fritz 2011).

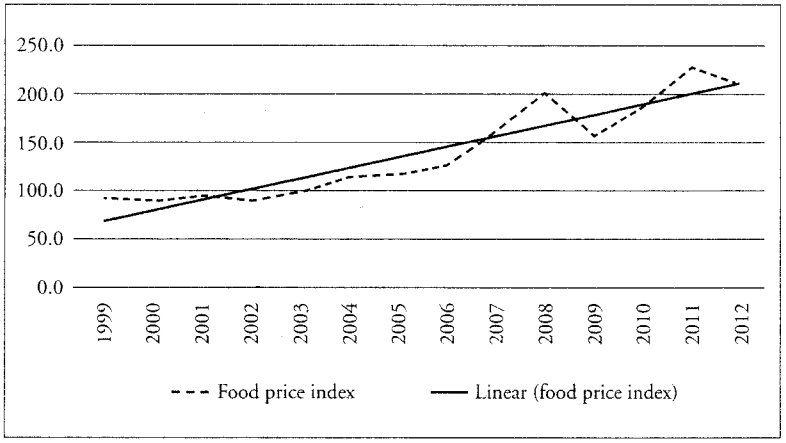
It could be said that the European Union has increased its stranglehold on the world food system, especially cereals. For instance, EU wheat exports increased from 10 million tons to 30 million tons, from the beginning of the 1970s to the early 1980s (a 10-year period), which was based on very significant increase in export subsidies (Fritz 2011). Not surprisingly, the EU's share of wheat exports went up significantly in some regions of the world; for instance, for North Africa as a whole, EU's share rose from 2 per cent in 1977 to 42 per cent in the early 1980s (Gardner 1996). Defending their subsidy provisions, in the Uruguay round of multinational trade negotiations (which involved 123 countries) from 1986 to 1994, the European negotiators proposed a global cereal cartel by dividing the world market among the major exporters into different influential zones. Accordingly, Africa would come under the EU, South East Asia under Australia and Latin America under the US (Fritz 2011). While this was no more than a proposal, it has been observed that in the course of time it has partially materialised. Currently, the EU is the second largest wheat exporter, controlling 17 per cent of the global wheat market between the years 2008 and 2011 (O'Brien 2011). In recent years, African countries, especially those in sub-Saharan Africa, have become the primary destination for EU wheat exports, with 75 per cent of the total EU wheat export destined for these countries.

In the past decade, food prices have reached an all-time high, spawning a global food crisis and affecting world trade. According to the United Nations Food and Agriculture Organisation, world food production increased rapidly over the past few years; nonetheless prices continue to spiral (Chandrasekhar & Ghosh 2012). Price volatility has pushed different regions into poverty, hunger and malnutrition, with the countries most exposed to price swings in the international market typically being food importers. Domestic and international food prices increased speedily and triggered a rise in the FAO food price index of 71 per cent during the 15 months between the end of 2006 and March 2008 (Wahl 2009). By the end of 2008, the United Nations (2009) reported as follows:

> The annual food basket in least developed countries cost more than three times that of 2000, not because of the increased volume of food imports, but as the result of rising food prices.

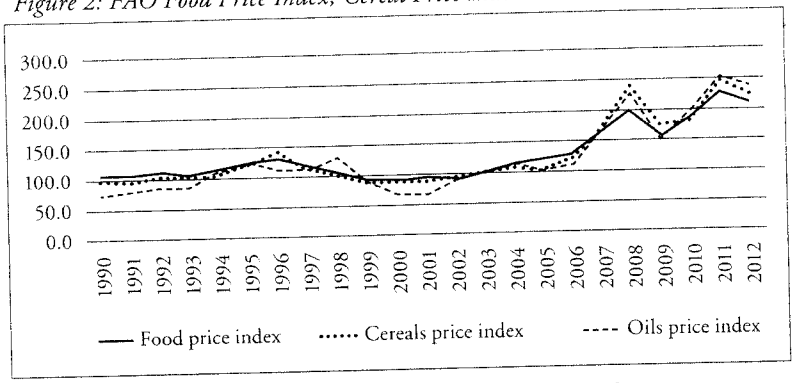
These increasing food commodity prices, such as rice, wheat and vegetable oils, have caused frequent hikes in the import bills of the least developed countries. From 2007 to 2008 LDC imports climbed by 37 per cent, from US$17.9 to US$24.6 million, after having risen by 30 per cent in 2006 (UN 2009, Baviera & Bello 2009). The food price indices in Figure 1 show a more or less continuous increase in overall food prices since 2002, with Figure 2 showing a similar trend in cereal and oilseed prices. While prices dipped between 2008 and 2009 they escalated in 2010–11 to beyond the 2007–08 level.

Figure 1: FAO Food Price Indices



Source: FAO *Food Price Indices* August 2012.

Figure 2: FAO Food Price Index, Cereal Price Index and Oilseed Price Indices



Source: FAO *Food Price Indices* August 2012.

Over time the post-2002 escalations in food prices added 75 million people to the ranks of the hungry and threw an estimated 125 million people in developing countries into extreme poverty (FAO 2008, Baviera & Bello 2009). The 2011 FAO report on World Food Security states that some of the factors responsible for price rises were: droughts in Australia between 2005 and 2007, which reduced wheat production and trade; policies to promote the use of bio-fuels that increased the demand for maize and vegetable oils; depression of the US dollar; longer-term economic growth that put upward pressure on the prices of petroleum and fertilisers because of the resource-intensive nature of the economic growth; and an increase in demand for meat products and hence for animal feed. Other reasons given include rising production costs, slower growth in cereal yields due to low investment in agriculture, and food price hikes due to increased demand on commodity futures markets as a result of both speculation and portfolio diversification. The report states that the biggest cause of the recent price spiral has been speculation in food commodities. The UN report *World Economic Situation and Prospects* for 2009 describes the crisis as the product of a "perfect storm" or an explosive conjunction of different developments. It states that the "speculative movements", which triggered the global financial crisis in 2007, also had a "considerable" impact on food prices.

Some institutions, like the International Food Policy Research Institute and the International Land Coalition and many commentators, attribute the 2007–08 food commodity price spirals chiefly to speculation in agro-commodity futures. They argue that when the real estate bubble burst in 2007, investors began speculating in the futures market for quick profits. Their entry in these markets tended to give a boost to trades and contracts but not to agricultural production, while their exit put upward pressure on prices. Apart from playing the futures market, multinational corporations and financial speculators increased their investments in agricultural land (considered a safe place to avoid losses from the bond market) in developing countries. The growing interest of these corporations in the agricultural production chain has sparked fears of a corporate takeover of the global food system, which would leave poor farmers and their dependents in the developing world more vulnerable to poverty and malnutrition.

Evidence over the past few decades points to a notable increase in the acquisition of land by transnational corporations and economically powerful international and national players. In recent years, some agri-business corporations, such as Cargill, DuPont, Monsanto, Syngenta and Bunge, have begun acquiring prime agricultural land in developing countries for direct cultivation of bio-fuels and a range of cash crops. The race picked up with a few emerging economic powerhouses and rich countries joining in. Hence, companies and governments from China, India, Brazil, South Korea, Kuwait, United Arab Emirates, Saudi Arabia, Qatar, Japan, Vietnam, Bahrain, South Africa, Saudi Arabia, Egypt and Libya have entered the fray for land acquisition. Most of the acquired agricultural land is in the sub-Saharan African countries of Sudan, Ethiopia, Ghana, Nigeria, Kenya, Tanzania, Mali, Madagascar, Democratic Republic of Congo, Malawi and Zambia.

The ongoing rush by multinational investors to acquire land in developing countries has contributed to the Third World food crisis. Concern about large-scale land acquisition is mounting as it seriously affects the fundamental rights of local inhabitants and compromises their food sovereignty. Despite this, the World Bank (2010) report on rising global interest in farmland observes that large-scale farming could be one of many tools to promote sustainable agriculture and rural development and directly support smallholder productivity; for example, through "outgrower programmes" where farmers are linked with a large farm or processing plant that supports production planning, input supply, extension advice and transport. The report rationalises the increasing global interest in farmland by saying that large-scale farming would facilitate opportunities for underdeveloped countries that have large agricultural sectors and abundant land, thus improving on agricultural investment The proponents of land acquisition argue further that offering

large corporations a bigger opportunity to invest in agriculture has the potential to reverse the long-standing underinvestment in the sector, which would allow land-abundant countries to gain access to better technology and result in more jobs for poor farmers and other rural citizens. They also claim that if managed well, such investment in agriculture could help to create the preconditions for sustained, broad-based development.

Further, the World Bank report states that large-scale investment in cultivation and processing will create economies of scale. These types of corporate farming would facilitate information technology and remotely sensed information on field conditions, taking care of product quality and food safety throughout the supply chain. Supporting the land acquisitions, the World Bank report claims that corporate farming has the capacity to establish supply chains of the kind that could be difficult under smallholder production models. Overall, the World Bank's policies and lending practices promote a market-based mechanism and the privatisation of land rights. This entails the conversion of customary land rights into marketable titles, withdrawal of state support for agriculture, and legal reforms that enable the functioning of Western-style markets (GRAIN 2010).

The United Nations and its agencies offer a number of reasons for the massive increase in land acquisitions and the recent upswing in domestic, private and foreign participation in agricultural activities in developing countries. The first is that the rapid rates of growth in some emerging countries and regions, such as Brazil, China, India, Central and West Asia, and the Republic of Korea, have resulted in rising incomes, leading to higher expenditures on food commodities (including a shift towards items such as meat, fish and milk products) and, in some cases, the import of additional items (such as feedstock) from other developing countries. The second reason is an increase in bio-fuel production, which has received strong support from governments in developing countries, and has resulted in increased investment by the US and the EU in developing countries in order to enhance the production of certain crops, particularly sugarcane, grains (such as maize) and oilseeds (such as soybeans), as well as non-food crops such as Jatropha. The third reason is the rapid rise in food prices over the past few years (partly attributable to the above trends), with subsequent shortages in commodities, such as rice, along with restrictions on the export of these products by some developing countries' governments, which has spawned "new investors" in agriculture. Finally, seizing on these trends, a number of purely speculative investors also appear to have emerged on the scene (UNCTAD 2009).

But the 2009 report on Foreign Direct Investment by the UN Conference on Trade and Development seems to have overlooked the deep-rooted role of finance capital and market volatility in the rush to acquire land in developing countries. Transnational corporations and speculators, in the wake of volatility in the bond market (and to cut their losses due to such fluctuations), entered into land transactions in developing countries. It is worth emphasising here that governments in several African countries have been selling and leasing land at throwaway prices without consulting their citizens: such acquisitions are basically for profits and not for providing any kind of food security to populations in these countries, as claimed by the World Bank (2010). The UNCTAD report on FDIs (2009) does not mention that the countries where the land acquisitions are taking place are resource rich, with bounteous arable land, and that the investment in agriculture is minimal. It is practically turning a blind eye to the fact that the interest of the transnational corporations is to establish large-scale production units, so as to create a food monopoly where grains will be sold at the expense of the poor. These land acquisitions are not only changing the mode of production and the relations of production with and within local populations, but also the entire range of social relationships which, in the end, will be entirely dependent upon market relations. It is part of the ongoing capitalist trajectory in which, ultimately, corporations will be the landowners and whole farming communities will be forced to work as labourers on what was formerly their own land.

Table 12 shows the extent of land acquisitions in five African countries – Ethiopia, Ghana, Madagascar, Mali and Sudan. In these countries, a total of 2 492 684 hectares were purchased or leased out between 2004 and early 2009. Within the five countries, a total of 184 land deals were cleared, with Ethiopia topping the list with 157 land deals, while the total investment was US$919 981 235 in the five-year period.

Table 12: Land under Investor Claim 2004 to Early 2009 (Approved Projects Only)

	Ethiopia	Ghana	Madagascar	Mali	Sudan	Total
Total land allocated (ha)	602,760*	452,000*	803,414*	162,850*	471,660*	2,492,684*
No. of projects approved (over 1000 ha)	157	3*	6*	7*	11*	184*
Largest land allocation (ha)	150,000	400,000	452,500	100,000	109,200	
Total Investment commitments (US$)	78,563,023*	30,000,000*	79,829,524*	291,988,688*	439,600,000*	919,981,235*

Source: Country Studies, as shown in Cotula L, Vermeulen et al. 2009. *Land Grab or Development Opportunity? Agricultural Investment and International Land Deals in Africa.* IIED/FAO/IFAD, London/Rome. * denotes incomplete data.

The data show that most deals were made in developing countries and that the biggest investors were governments or multinational corporations from other developing countries. The targeted African countries have abundant forest areas, agricultural land and unexploited natural resources. In the name of increasing the gross domestic product, and under the guidelines of Bretton Woods institutions, the world's poorest countries are submitting to land acquisitions for industrial and agricultural use. In most cases, the deal is to produce cash crops.

A January 2012 report, based on the Land Matrix online portal's database (Anseeuw et al. 2012a), reveals that worldwide between 2000 and 2011, land deals involving a total of 203.4 million hectares were reported as approved or under negotiation. Of these, deals for 70.9 million hectares had been cross-referenced (as to where the deals have actually materialised). The Land Matrix Project (Anseeuw et al. 2012a) confirms the unparalleled scale of land purchase over the past decade. Apart from food and farmland, 78 per cent of the cross-referenced land deals were for agricultural production with three-quarters for bi-fuels. The remaining deals (22 per cent) were for mineral extraction, industry, tourism, and forest conversions. The database confirms that Africa is the prime target of the land rush, with 134.5 million hectares of land acquisition reported, of which 34.3 million hectares were cross-referenced. Asia is the next target, with 28.6 million hectares cross-referenced by the project. Table 13 shows that up until 2012, a total of 18.9 million hectares of land deals were reported in Latin America, of which 6.3 million hectares were cross-referenced.

Table 13: Regional Focus of Land Acquisitions

Region	Number of Hectares (millions) Reported	Number of Hectares (millions) Cross-referenced
Africa	134.5	34.3
Asia	43.4	28.6
Latin America	18.9	6.3
Europe	4.7	1.5
Oceania	0.7	0.1
World	203.4	70.9

Source: Anseeuw et al. 2012a. *Land Rights and the Rush for Land: Findings of the Global Commercial Pressures on Land Research Project.* January 2012. <http://www.landcoalition.org/sites/default/files/publication/1205/ILC%20GSR%20report_ENG.pdf> accessed 12 March 2012.

Another report (April 2012), also based on Land Matrix data (Anseeuw et al. 2012b), points to 1 217 agricultural land deals in developing countries, amounting to 83.2 million hectares of land between 2000 and 2010. Of these, 625 land deals (51.4 per cent of the total) covering 32.7 million hectares (39.3 per cent) are classified as reliable, with the transactions reported as having taken place (see Table 14). The main target was again Africa with 62 per cent of the land deals, covering a total area of 56.2 million hectares (equal to the total territory of Kenya) of the total 1 217 reported land deals, while 17.7 million hectares were reported in Asia and 7 million hectares in Latin America. The remaining 2.2 million hectares were reported from other regions, particularly Eastern Europe and Oceania.

Table 14: Number and Size of Large-scale Land Acquisitions for Agriculture

	Number of deals	Number of hectares
Only Reported	592	50 481 345
Reliable	625	32 735 012
Total	1 217	83 216 357

Source: Anseeuw et al. 2012b. *Transnational Land Deals for Agriculture in the Global South (Analytical Report based on the Land Matrix Database).* April. <http://www.oxfam.de/sites/www.oxfam.de/files/20120427_report_land_matrix.pdf> accessed 16 May 2012.

Media reports claim that the pace of land acquisition has increased rapidly since the previous decade, influenced by the ongoing economic crisis. In this regard, the biggest problem is availability of authentic data, because neither the targeted countries nor the governments and corporations involved in land acquisition provide reliable information about the terms and conditions under which deals have taken place. The only information available comes from a few media reports and independent research studies.

The seriousness of this larger-scale process of land acquisition cannot be over emphasised. The implications for local food supplies have historical precedents. To illustrate just one case, at the 150th commemoration of the Irish Famine at Cork, Ireland, the city mayor told the audience: "How barbarian was the society then that at a time when people were dying of hunger and starvation, corn was being loaded in the ships for export to neighbouring Britain" (Sharma 2008). Now once again, the world is making a formal step towards a new kind of colonialism in the form of land acquisition in the Third World countries. The result is likely to be large food

estates on the one side and mass deprivation, hunger and unemployment on the other. With land increasingly subject to ownership by monopolies, big corporations become the "price makers" (Lenin 1917, Baran & Sweezy 1966). At the same time, the neo-liberal system is proving itself to be destructive to existing institutional frameworks and powers (such as state sovereignty over political-economic affairs) and to "divisions of labour, social relations, welfare provisions, technological mixes, ways of life, attachments to the land, habits of the heart, ways of thought" (Harvey 2006: 23).

CONCLUSION

As in the colonial days, the current global food regime is seeing advanced nations twisting the arms of less developed nations to serve their own interests, an integral part of which is to further the neo-liberal agenda via WTO regulations, the IMF and the World Bank. Under the new WTO regime, subsidies in agriculture remain a bone of contention between the developed and developing world. While advanced countries provide major support to help their farmers produce crops below the cost of production, governments of developing countries have cut subsidies, thereby increasing the cost of production and making agriculture unviable to farmers. As per a WTO-administered agreement, developed nations are expected to cut subsidies by 36 per cent and developing ones by 24 per cent; however, even after this reduction, the developed countries have the advantages of direct and indirect support to their farmers that developing ones do not. This has forced them to import subsidised food commodities produced in the advanced countries.

A more overriding aspect of the prevailing global food system is the corporatisation of agricultural production, trade and retail. An increasing volume of agricultural trade is being carried out by transnational corporations instead of between countries.

As stated earlier, these corporations not only control trade but have made inroads into agricultural production, its technology and retail chains across the globe. WTO regulations which, under the Trade Related Intellectual Property Rights, have granted patents on staple crops to a handful of multinationals, are serving to further entrench the power imbalance. With corporations controlling large proportions of the patents for staple food crops, seeds and pesticides and having the means to accumulate capital, they have been able to purchase and lease agricultural land in African, Asian and Latin American countries and also determine which crops the land is used for. This means that basic resources like water, soil and seeds are being sold

to transnational corporations, giving them control over entire agricultural production and retail chains. The corporations claim that they are using the rights granted to them (patents, land, water, trading privileges) to address food insecurities in the domestic countries, but the reality does not bear this out, since much of the land under their control is being planted to crops destined for export.

In effect, the neo-liberal dispensation has created a mechanism to transfer assets and redistribute wealth and income, both from the mass of the population to the wealthy classes, and from vulnerable to richer countries. This mechanism has been called "accumulation by dispossession' (Harvey 2003). The end result of this skewed distribution of resources and corporate control is increasing instances of poverty and inequality leading to greater conflict in developing nations. Clearly there is need for policies that will curb the expansion of the corporate food regime in developing countries.

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