

THE GLOBALIZATION OF AGRICULTURE AND SOCIAL RESISTANCE

By

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ABSTRACT

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Today, within our current global economy, food has become a target of neo-liberal policies, which has transformed how farmers practice agriculture and the types of food they grow. In the pursuit for free-trade, the world's food supply has been placed in the hands of transnational corporations, who have pushed for an industrial practice of agriculture in place of traditional knowledge. Today small family farmers and subsistence farmers are being threatened by an industrial practice of agriculture, which has transformed much of the traditional farmlands of the world into large corporate farms for the mass production of cash crops. Neo-liberal policies have allowed corporations to seize the world's food supplies and place it on the global market to be sold for profit. The result of this has been the displacement of rural peoples to urban centers, increased poverty, starvation and the degradation of our ecosystems.

In opposition to current global food policies, people around the world are rising up in resistance. This resistance comes in all different forms across the globe, but all unify in the injustices of global food policies. One such movement found in the United States, is Community Supported Agriculture (CSA). I have been a part of this movement for the past four years at Redwood Roots Farm, a local CSA, located in Arcata California.

While working with Janet Czarnecki, the owner and head farmer of Redwood Roots Farm, we both recognized the importance of educating our shareholders, interns and community on the topics of globalization, agriculture and social resistance. This is when we came up with the idea for an educational guide on these topics.

The goal of this project is to educate our community by providing a history of globalization, the institutes that govern global trade, global food policy and those around the world who are in resistance to these policies. From this we hope that our community will have a better understanding of our global economy and global food politics, so that they may be better equipped to make informed decisions about the food they buy, where it comes from, and the types of food they eat.

We hope that this guide can be utilized as a resource as well as an educational tool for workshops on and off of the farm. This project is geared towards adult shareholders, interns and all visitors of Redwood Roots Farm. The greater goal is to make this guide accessible to the general public on how the global economy has transformed food systems around the world.

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CHAPTER 1: INTRODUCTION

Globalization is a concept that has been debated within the academic, economic, political and social world, however all agree that this concept is particularly important for the twenty-first century (Robinson, 2001). Globalization has become the popular terminology for explaining the increasing integration among our economies, political ideology and social relations around the globe. According to Joseph Stiglitz (2003), the World Bank's former economist, globalization can be defined as:

The closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders (Stiglitz, 2003:9).

Globalization is not a new phenomenon; rather it is a historical process of thousands of years of trade, and most recently the spread of capitalist relations around the globe. With the advancement of communications, transportation and computer technology, the movement of goods, services, and people across nations has drastically increased and transformed our global economy. According to Mustafa Koc (1994), Associate Professor of Sociology at Ryerson University, “Globalization has most notably manifested itself as a process of expansion of commodity relations, integration of domestic markets, and emergence of an international division of labor” (Koc 1994:266). With the creation of the International Institutions, the International Monetary Fund (IMF), the World Bank (WB), the World Trade Organization (WTO), and the persistent

pressure from corporations, most countries in the world have substantially lifted their barriers to trade and adopted a neo-liberal ideology. Today our world food supplies have been a target of neo-liberal policies, which has transformed how we get our food and the types of food we receive. In the pursuit for ‘free-trade’, globalization has homogenized food intake and has been placed in the hands of transnational corporations. Today corporations have seized our food supply as a commodity, which has undermined local food security as well as local knowledge and diversity.

Prior to the 1986-1994 Uruguay Round of GATT, agriculture was seen largely as a domestic matter, and was exempt from free trade policies. This position on agriculture was reversed at the Uruguay Round and for the first time agriculture became liberalized under the Agreement on Agriculture (AOA). The AOA was committed to liberalizing the world’s food supply by reducing and eliminating tariffs, import quotas on commodities and any other obstacle obstructing trade, as well as reducing or eliminating subsidies and direct payments to farmers (Barker, 2002). The AOA became institutionalized with the creation of the World Trade Organization (WTO).

In opposition to the policies that have arisen under globalization, there is much resistance. This resistance comes in all different forms across the globe and includes: La Vía Campesina, Brazil’s Rural Landless Workers Movement, Navdanya, Slow Food and the Community Supported Agriculture (CSA) movement. All these movements unify in the injustices of global food policy and have provided a voice for those who have been marginalized, as well as providing alternatives to the current agricultural practices. For the past four years I have been working at a local CSA, Redwood Roots Farm, located in

Arcata, California. It was this work that ignited my interest in global food policy and social movements.

CSA is a growing movement of farmers and community members who have come together in support of one another. The CSA movement comes in response to current agricultural policies and practices, and offers an alternative by growing local food for local people at a fair price to them and a fair wage to the grower, grown in a manner that is sustainable for the land (Henderson, 1999).

CSA farmers are dedicated to: sustainable agricultural practices, connecting producers with consumers, growing a variety of produce, strengthening local economies, as well as creating community (Henderson, 1999). In essence, the idea is that community members pay the farmer an annual membership fee to cover the cost of the farm, and in return, members receive a weekly share of the harvest during the local growing season.

CSA is also committed to education and Redwood Roots is no exception. Redwood Roots Farm offers community classes, workshops, hosts kid tours and several Humboldt State University and Collage of the Redwoods classes, as well as offering the spring and summer internship program. In the last year Redwood Roots has expanded its education outreach by creating an education program, headed by Erin Derden-Little. So far Erin and Janet have expanded the number of tours on the farm, created a workshop series, offered a 2007 summer camp for kids through the Natural History Museum, and are continuing to network within the community.

While working with Janet Czarnecki, the owner and head farmer of Redwood Roots Farm, we found that many people had questions about industrial agriculture and

global food policy. Because of Redwood Roots' dedication to education we felt that these questions should be answered. This is when we came up with the idea for an educational guide on the topics of globalization, global food policy, and social resistance.

The goal of this project is to educate our community so that they have a better understanding of globalization, the institutions that govern global trade, global food policy, and those around the world who are in resistance to these policies. From this we hope that our community will be better equipped to make informed decisions about the food they buy, where it comes from, and the types of food they eat.

We hope that this guide can be utilized as a resource as well as an educational guide for workshops on and off of the farm. This project is geared towards adult shareholders, interns and all visitors to Redwood Roots Farm. The greater goal is to make this guide accessible to the general public on how the global economy has transformed food systems around the world.

The following chapters highlight the information found throughout the educational guide, *The Globalization of Agriculture and Social Resistance* (Appendix A). I take this opportunity to expand on Community Supported Agriculture as an alternative to current global food policies and practices. This is followed by a history of Redwood Roots Farm and their commitment to education. The final chapters look at how I framed the educational guide and the resources that informed this project.

CHAPTER 2: COMMUNITY SUPPORTED AGRICULTURE

Global Food Policy

Not unlike our global economy, agriculture practices have changed drastically in the last century with the adoption of science, technology and the development of capital-intensive farming operations. Today small family farmers and subsistence farmers are being threatened by an industrial practice of agriculture, which has transformed much of the traditional farmlands of the world into large corporate farms for the mass production of “cash crops.” Industrial agriculture requires the use of pesticides, insecticides, fossil fuels, hybrid seeds, genetically modified seeds, mechanization and the mass production of monocultures for export. This industrial model of agriculture is based on an import/export model, which has forced farmers in developing nations, who primarily grew diverse, local crops for local consumption, to grow crops for export (Barker, 2002). Big agribusiness claims that industrial agriculture will decrease poverty and world hunger. Although it has increased food production, it has resulted in the displacement of rural peoples to urban centers, increased poverty, dependency, malnutrition, starvation, disease, death, and the degradation of our ecosystems.

The International Institutions that govern global trade: the IMF, the WB and the WTO have pushed these practices onto developing countries as “development” projects and “structural adjustment programs.” Prior to the 1986-1994 Uruguay Round of GATT, food was exempt from trade liberalization, but became liberalized though the Agreement on Agriculture (AOA). For the first time food was no longer a domestic matter, rather it had become another commodity that could be bought and sold on the global market. The AOA opened up markets to the world’s food supply by reducing and eliminating tariffs, import quotas on commodities and legalized the dumping of genetically engineered (GE) foods on developing countries (Barker, 2002). The WTO’s Trade-Related Aspects of Intellectual Property Rights (TRIPS), has given corporations the right to patent life forms, such as seeds, making it illegal for farmers to save and exchange seed. The WTO enforces these laws by punishing any and all countries that challenge these global policies in the pursuit of free trade.

The effects of industrial agriculture and neoliberal policies in the U.S. have been extensive. For example, prior to the twentieth century, the U.S. was largely an agrarian society. As late as 1910, one-third of the population, roughly thirty-two million people lived on farms. By 1997 the number dropped to 1.92 million, so few that the U.S. Census Bureau stopped counting farmers (American Farmland, 1998:4). Before this time most communities ate local food grown either in their own gardens or by local farmers. Today, most Americans get their food at the store with no knowledge of where the food was grown, by whom or by what methods. In the U.S. food travels an average of 2000 miles

from the farm to the dinner plate. There is a huge disconnect between the food consumers eat and where it comes from.

Today, current food policies require food to be flown thousands of miles away from the communities who grow the food. Under the GATT regulations of the AOA, U.S. agricultural exports have risen 5 percent, but imports have also gone up 32 percent, including imports on crops that are grown in the U.S. (Henderson 1999:15). For example, it is not uncommon to live in the Corn Belt states of the U.S. (Iowa, Illinois, South Dakota, Nebraska, Indiana, western Kentucky and Ohio) and have to buy corn that came from Mexico, Canada or one of the other corn growing states. The majority of the corn grown in the U.S. is controlled by large agribusiness that ships the corn to one of their processing plants to be turned into starch, sweeteners and corn oil found in thousands of food products. These products, such as ketchup, soups, hotdogs and soda are packaged and then shipped around the world, and back to the very communities that grew the corn. The U.S. is the largest corn producer and exporter, contributing to around 60 percent of the corn sold on the global market. Today the global market dictates to farmers what crops to grow. Most of the produce is limited to a few varieties of grain, soybeans and corn, which is then exported out of the U.S. and sold on the global market. Corn, wheat and grains are an important part of the American export program, which have forced U.S. farmers to abandon growing other food crops for these cash crops.

Community Supported Agriculture

Community Supported Agriculture (CSA) is just one of many movements that are in opposition to the policies that have arisen under globalization. CSA is a growing movement of farmers and community members who have come together in support of one another. The CSA movement comes in response to current agriculture policies and practices and offers an alternative by providing healthy food for local people through a sustainable practice.

The CSA Movement started in the United States in 1986 at two farms simultaneously, but independently of each other, Indian Line Farm in Massachusetts and Temple-Wilton Community Farm in New Hampshire (McFadden, 2003). These two farms were influenced by practices found in Switzerland and Germany, where farmers asked their customers to pay a share of the farm's annual production costs in exchange for a weekly share of produce. These two farms began educating farmers and consumers in the surrounding area about this revolutionary idea and it began to spread across the U.S. Today, the U.S. is home to at least 1,700 CSA farms.

Community Supported Agriculture is a unique model of local agriculture that comes from many different influences from around the world. Jan Vander Tuin brought this concept over from Switzerland in 1984, and shared what he had experienced with his friends at Indian Line Farms. In New Hampshire, Trauger Groh, a founding member of Temple-Wilton farm, had moved over from Germany, and modeled this concept from what he had experienced back in Germany (McFadden, 2003). This concept of local food

for local people comes from traditional practices of agriculture, and in response to agricultural modernization, communities around the world are finding alternative ways to grow and buy food. Other influences of CSA come from the biodynamic movement, the co-operative movement, and the producer-consumer food alliances inspired by projects in Chile.

While the original North American CSAs were modeled after the ideas brought over from Europe, a similar idea was developed in Japan over 40 years ago. The movement in Japan was initiated by a group of women concerned with the use of pesticides, the increase in processed and imported foods and the corresponding decrease in the local farm population. These women approached a local farmer and created a partnership, which began the “teikei” movement. Teikei, literally translated, means partnership or cooperation, but those involved in the movement will tell you that the philosophical translation is “food with the farmer’s face on it” (Henderson, 1999). The CSA movement borrows from all of these arrangements, and shares in the common concerns and ideas expressed in these communities around the world.

Community Supported Agriculture is a relationship of mutual support and commitment between local farmers and community members who pay the farmer an annual membership fee to cover the cost of the farm. In return, members receive a weekly share of the farms bounty throughout the growing season, as well as reconnecting to the land and directly participating in food production. Members also share in the inherent risks of farming, including poor harvest due to bad weather and pests, but also share in the potential bounty (DeMuth, 1993). Consumers benefit from a CSA arrangement by

receiving a wide variety of foods harvested at their peak of freshness, ripeness, and by learning about new and seasonal foods and sustainable agriculture. Growers benefit from a secure annual income and market for their crops, and both parties benefit from having a more personal connection with each other.

CSA supports a sustainable agriculture system. It cuts out the middlemen by connecting the producer with the consumer, grows a diversity of produce, strengthens local economies and creates a community around the farm. Most CSA farms believe in these core concepts, yet each of these farms is unique. They come in all different sizes and scales and are as diverse as the communities and people who established them. Each CSA farm is unique, they come in all different sizes and scales, produce in different communities, environments and landscapes. For example, in Humboldt County California, there are several CSA farms that have diverse set ups, as well as offering diverse products. Redwood Roots Farm is a CSA that is owned by the farmer, Janet Czarnecki, and offers a diversity of vegetables, fruits, herbs, flowers as well as providing educational workshops and tours to the community. The Arcata Educational Farm is a city park owned by the city of Arcata, and is set up so that up and coming farmers have a place to start. On average, the farmers rotate every two years and they also offer a diversity of vegetables, fruits, herbs and flowers. And for the first time ever in Humboldt County, Kevin Cunningham of Shakefork Farms is offering a grain CSA, which includes an assortment of grains, grain flours, hot cereal mixes and special culinary seeds. These are just a few examples of how each CSA differ from one another and it is this diversity that embraces the spirit of CSA.

Community Supported Agriculture attempts to challenge the current food system by revitalizing a traditional practice of agriculture that embraces the community for which the food is grown. The CSA movement is dedicated to sustainable practices of agriculture, economic viability for farmers and a direct relationship with the community that supports the farm (Delello, 2004). CSA offers an alternative to the industrial model of agriculture, by growing local food for local people.

CHAPTER 3: REDWOOD ROOTS FARM: CSA MARKET GARDEN

History

Redwood Roots Farm was first established in 1997 by Erin Anderson. She leased a half acre of land in Bayside in the fall of 1997 with the goal of having 1998 be the first CSA season for Redwood Roots Farm. Early in the spring of 1998 Christine “T” Griffin joined Erin at Redwood Roots Farm. They decided they needed more land and leased another half acre near the original site, and began their first CSA season with 50 shareholders. During that first year the shares were delivered to two locations, Wildberries Market in Arcata and Jacoby Creek School in Bayside (Delello, 2004). At the end of the 1998 season, Erin decided that it was time for her to move on, and left Arcata and Redwood Roots Farm.

Soon after Erin’s departure, T found another piece of land available for lease. This land was located in the floodplain of Jacoby Creek, just south of Bayside. At this time the parcel was owned by Bill and June Thompson, who had placed a conservation easement on the land, held by the Jacoby Creek Land Trust. Under the easement, four acres of a 10 acre parcel was set aside as an organic farm site, and available for lease. T jumped at the opportunity to lease the land and it became Redwood Roots’ new site for the 1999 growing season (Delello, 2004). This new location allowed for shareholders to pick up their share at the farm, creating a more intimate and interactive community. T

kept the half acre located in Bayside, but decided to let go of the other half acre located on Old Arcata Road (Redwood Roots, 1999).

Not wanting to take on this endeavor alone, T began looking for a new partner. Janet Czarnecki, the current owner and farmer, joined T and Redwood Roots in the spring of 1999. For the next few years T and Janet worked hard to build up the infrastructure of the farm. They slowly made improvements to the farm which included: building a deer-proof fence, building two sheds, one to distribute the produce and another to wash and store the produce, erecting two 50 foot long greenhouses and in 2001 purchasing a new John Deere Tractor (Redwood Roots, 2002-2003). These improvements allowed for the community of Redwood Roots to expand, with a continual growth of interns, shareholders and classes held at the farm.

The birth of T's first child in the spring of 2003 meant the end of a partnership between the two farmers. Janet became the sole farmer of Redwood Roots Farm. To ease the work load and to provide an opportunity for up and coming young farmers, Janet began an apprenticeship program.

In the spring of 2004, Redwood Roots' future became secure when Bill and June Thompson offered to sell the land to Janet. According to Janet, it was because of the vision and foresight in placing a conservation easement on the land, and the generosity of the Thompsons that the land was actually affordable (Redwood Roots, 2005). With the financial help from good friends, Janet was able to purchase the land giving Redwood Roots a permanent home.

The summer of 2004 was when I found my way to Redwood Roots Farm through its internship program. Four years later I am still with Redwood Roots Farm as a permanent member on the farm crew, alongside of Erin Derden-Little. Throughout these four years I have watched the farm grow exponentially. Each year has been dedicated to the improvement and efficiency of the farm. For example, in 2007, Janet focused on increased efficiency by “standardizing and streamlining nursery and field operations” (Redwood Roots, 2007). This has allowed for increased production, which has resulted in increased sales at The Farmers Market and the continual growth in the number of shares we offer at the farm. As of 2007 Redwood Roots Farm grew food for 120 households, which is a huge leap from the 50 shares offered in 1998.

In the summer of 2006 a classroom was build on the farm to aid in the educational program offered at Redwood Roots Farm. Education and community outreach has always been an integral part of the farm, which encompasses the spirit of CSA. As early as June of 1999, Redwood Roots Farm was hosting tours on the farm as well as offering internship and volunteer opportunities. As the years have passed the education program has continued to grow, and in 2007 Erin Derden-Little became Redwood Roots Education Program Director, creating an official education program.

Redwood Roots expanded its children’s program in 2007 making it the best year yet. Partnering with Community Alliance with Family Farmers (CAFF), Redwood Roots hosted 20 Farm-to-School fieldtrips for local elementary school classes, hosted a third grade class from Coastal Grove charter school for two half days, and was host to a weeklong summer day camp put on by the Natural History Museum.

As part of the new education program Redwood Roots Farm hosted a Workshop Series beginning in the spring of 2007. The Workshop series included a diverse array of topics, such as: food and democracy, organic gardening, amphibians, birds and flower arranging, just to mention a few. Some of the featured speakers included individuals from Democracy Unlimited of Humboldt County, UC Sustainable Agriculture and Research Program, Potowat Health Village, The US Fish and Wildlife Service, as well as Redwood Roots Farm shareholders and farmers (Redwood Roots 2008). All of these workshops were open to the entire community on donation, making it affordable for everyone.

2008 marks Redwood Roots 11th year in existence and 10th year at the Jacoby Creek site. We believe this is just the beginning of great things to come. With Erin Derden-Little heading up the education program and the new addition of Eddie Tanner, former farmer of Potowat Village, we are optimistic and excited to start the 2008 growing season. Our goal for 2008 is to refine what we have been doing for the past few years, such as, increasing the number of seeds sown, planted and harvested. We are excited to put all of our energy into the CSA, while we nurture the soil, feed our bodies, educate and celebrate.

CHAPTER 4: CONTEXT OF PROJECT AND RESEARCH METHODS

Practicing Placement and Project

For the past four years I have been involved in Community Supported Agriculture at Redwood Roots Farm located in Arcata California. Redwood Roots farm was my field site placement for the past two years for the practicing track of the Sociology Graduate Program. While working with Janet Czarnecki, the owner and head farmer of Redwood Roots Farm we found that many visitors to the farm had questions about industrial agriculture and global food policy. Because of Redwood Roots dedication to education we felt that these questions should be answered. After many discussions with Janet we came up with the idea for an educational guide.

The project that Janet and I came up with was to write an educational guide on the topics of globalization, global food policy, and social resistance. The goal is that the educational guide can be utilized as an educational tool on and off of the farm. From this we hope that our community will be better equipped to make informed decisions about the food they buy, where it comes from, and the types of food they eat. Because of Redwood Roots' commitment to education we both saw this project as an opportunity to bridge my academic studies with the farm and the larger community.

Methods for Framing the Educational Guide

The idea for the guide came from the many questions that visitors to the farm had about industrial agriculture and global food policy. Because this guide is for the public I felt that it was important that the information conveyed in the reader reflect the interest of the public. To go about doing this I utilized applied research methods. These methods are participant observations, informal conversations and literary analysis.

Participant Observation

I first arrived at Redwood Roots Farm as an intern in the summer of 2004. By the fall of 2005 I began my practicing placement for the Applied Track of the Sociology Graduate Program. It was my continual relationship with the farm that allowed me to be in the position of an insider participant. It was this relationship that gave what Patricia and Peter Alder (1987) call “complete membership” giving me the advantage of already knowing the “cast of characters” or at least a segment of the population. Because of my position on the farm I was able to discuss my project with the Redwood Roots community and compile comments, concerns and questions about my research.

Redwood Roots community includes: shareholders, interns, volunteers, the surrounding farming community and various local organizations that support local food production. As indicated in a study conducted by Courtney Delello (2004), the majority of Redwood Roots community members have come together not only for the produce, but also because of shared values and concerns, supporting local farms growing food in an

ecologically sound manner (Delello, 2004:32). These findings support the larger definition of community which defines community as a group of people coming together because of shared common beliefs, values, concerns and interests (Debertin, 2001).

My position as an insider participant not only gave me access to the community surrounding the farm, but I was also part of the physical processes that goes into sustainable food production. With the rising awareness of health effects from industrial agriculture, Community Supported Agriculture acts as an alternative to the dominant practice of industrial food production. I felt that it was important for me to be involved in food production as a means to understand the issues surrounding local food production and the controversy over industrial agriculture.

Informal Conversations

The project assigned to me was to create this educational guide on the globalization of agriculture and social resistance. As mentioned earlier I needed to frame the guide in a way that would be beneficial and comprehensive to the public. How I went about doing this was through informal conversations. I had conversations about these topics with Janet of Redwood Farm, various farmers throughout Humboldt County, interns, volunteers, shareholders, fellow students, my advisors and professors, friends and family and anyone willing to talk to me. I took every opportunity to discuss the project with as many people as possible. What I wanted to get out of these conversations was what people were interested in learning and what people knew or didn't know about the

topic. From these conversations I was able to detect various themes off interest for the educational guide.

Literary Analysis

As I was participating on the farm and conversing with the Redwood Roots community and beyond, I was able to compile questions, concerns and knowledge about the topics of globalization, agriculture and social resistance. With the information that I gathered from the community, I began doing literary research to see what overlapping themes arose out of the resources available to me. These resources included academic, economic and political journals, books, magazines, newspapers, organizational and institutional web pages and video documentaries. From these resources I was able to compile an impressive amount of information that has allowed me to write the educational guide “The Globalization of Agriculture and Social Resistance.

Framing the Educational Guide

From all of the information that I gathered from my participant observations, informal conversations and literary resources, I was able to frame the guide in a way that will hopefully be of use to the Redwood Roots community and beyond. I know that this may have been a lot of work just to frame this project, but I felt that it was important to find out what people knew and didn’t know about the globalization of agriculture. I too wasn’t completely aware of this subject, so this allowed for me to follow leads in

conjunction to what people were telling me, what I was reading and what I was learning on the farm.

After gathering this information I came up with a list of questions that I would attempt to answer in the educational guide: What is globalization? Who are the international institutes who govern global trade? How do these institutions affect our food systems here in the U.S. and elsewhere? What is industrial agriculture, and how does it affect our food systems? What interests do corporations have in agriculture, and how do they influence global food policy? How do such agreements as the North American Free Trade Agreement and the Central American Free Trade Agreement affect our food system here in the U.S. and elsewhere? And what are some of the social movements that are in resistance to agricultural policies and agreements? From here I set out to answer these questions and have created a guide that I feel is easy to follow and intelligible

CHAPTER 5: LITERATURE REVIEW

In order to write the educational guide I used a vast array of resources. As mentioned in the methods section I utilized academic, economic and political journals, books, organizational and institutional web pages, magazines, newspapers, and video documentaries. From all of these resources I took what was the most accredited and accurate information I could find and put together a translation of the information so that it could be more intelligible to the public. The following describes how I came to organize the guide, the dominate themes that emerged, as well as a discussion of the resources that informed the educational guide

Organizational Structure

From the conversations that I had with the community I found that many were unsure exactly what globalization was or about the institutes who govern global trade. Many had heard of the World Bank (WB), the International Monetary Fund (IMF), the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO), but were unaware of their functions and how they affected global food politics. I figured that if I was going to explain global food policy that I should first provide a foundation of our current global economy. Once I provided the information on globalization I proceeded to look at agricultural policy within the current global economy and those who are in resistance to these policies.

From these conversations and from the resources I utilized, I split the guide into three chapters: Chapter one, “What is Globalization?” addresses the concept of globalization, provides a brief history of the IMF, WB, GATT and the WTO, neo-liberalism and corporate interests. Chapter two “The Globalization of Agriculture” provides a brief history of twentieth century agriculture, agricultural policies within the IMF, WB, GATT and the WTO and corporate interests. Chapter three “Social Resistance” looks at several social movements around the world who are in resistance to global food policies.

What is Globalization?

Chapter one of the educational guide “What is Globalization” provides a brief overview of Globalization and the international institutes that govern global trade, The World Bank (WB), The International Monetary Fund (IMF), The General Agreement on Tariffs and Trade (GATT) and The World Trade Organization (WTO). I also address the economic ideology of neo-liberalism and free-trade as well as corporate influence within our current global economy. In this section I define globalization and discuss what each of these institutions are and how their policies have changed over the last 60 plus years.

To address the above inquiries I borrowed from an array of resources. The theoretical foundation for this section comes from the works of William Robinson (2001) professor of sociology at the University of California, Santa Barbara and author of *A Theory of Global Capitalism*, Wayne Ellwood (2001), editor for the New Internationalist Magazine and author of the *No-Nonsense Guide to Globalization*, Phillip McMichael

(1998) a professor of development sociology at Cornell University and author of *Global Food Politics*, Sarah Anderson, John Cavanagh and Thea Lee (2005) authors of a *Field Guide to the Global Economy* and Joseph Stiglitz (2003), former Chief Economist and Senior Vice President of the World Bank and author of *Globalization and Its Discontents*. These authors provided the foundation of the work found throughout this chapter. I also gathered information from other various scholars, authors and activists as well as compiling information from official websites.

Globalization

From the works of Robinson and Ellwood I was able to provide a historical context for globalization. According to the two authors I was able to conclude that globalization is not a new phenomenon, rather it is new word to describe an old process (Robinson 2001; Ellwood 2001). What makes globalization differ from previous stages of capitalism is at the rate it is spreading, and the displacement of power from governments to supranational institutes, such as, the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Organization (WTO) (McMichael 1998). Within this historical context I found a working definition of globalization which explains why this era of trade is unique. I borrowed my definition from Stiglitz (2003), who concludes that globalization is:

The closer integration of the countries and peoples of the world which have been brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders (Stiglitz 2003:9).

I expand on these concepts by providing examples of economic globalization such as the standardization of the products we buy and advancements in telecommunications and technology, which make it possible to do business in Hong Kong from the comfort of one's office in New York City.

International Institutions

To further explain globalization I provide a brief history of the international institutions who govern global trade, the IMF, the WB, the GATT, and the WTO. The resources that informed this part of the guide came from the official websites of the IMF, the WB and the WTO, the works of Sarah Anderson, John Cavanagh, Lee (2005) and Joseph Stiglitz (2003), as well as from Leif Utne (2005) of Utne magazine. From these authors, I was able to conclude the following on the IMF, the WB, the GATT and The WTO.

In July of 1944, delegates from 44 nations met in Bretten Woods, New Hampshire, to outline a framework for the postwar global economy. Out of this meeting the International Monetary Fund (IMF) and the World Bank (WB) were created. These institutions were created to finance the rebuilding of Europe after the war, to promote global trade and to put in place a global economic system. As stated on the World Banks website “The Bank's mission evolved from a facilitator of post-war reconstruction and development to its present day mandate of worldwide poverty alleviation” (World Bank 2006). According to Stiglitz (2003) the IMF “In its original conception, was based on a recognition that markets often did not work well that they could result in massive

unemployment and might fail to make needed funds available to countries to help them restore their economies” (2003:12). Stiglitz (2003) goes on to say that the IMF was founded on the belief that there was a need for collective action at the global level for economic stability, but has failed in its mission.

The GATT was created shortly after the inception of the IMF and the WB. The GATT, not unlike a treaty, was a set of negotiated rules and regulations on trade in industrial goods agreed upon by member nations. Its goal was aimed at reducing national trade barriers. The final round of the GATT negotiations, the 1986-1994 Uruguay Round, resulted in the largest negotiation mandate in trade history liberalizing services, banks, intellectual property rights and agriculture. The Uruguay Round resulted in the creation of a new set of world trade rules to regulate the new global economy and the creation of the World Trade Organization (WTO).

The WTO is the successor to the GATT, and as a successor, the WTO solidifies suggested policy into permanent enforced standards. As stated on its web page, “the WTO is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible” (World Trade Organization Website 2008). As stated by Leif Utne of Utne magazine “One thing is for sure is that the WTO has had a greater impact on the global economy than any other institution” (2005:72).

Neo-liberalism

I follow this up with explaining neo-liberalism, which has become the popular economic ideology in the second half of the twentieth century. To explain Neo-liberalism I borrowed from Susan George (1999), who gave a lecture titled a *Short History of Neoliberalism* at the Conference on Economic Sovereignty in a Globalizing World, Elizabeth Martinez and Arnoldo Garcia (2000) authors of *What is Neo-Liberalism?* In order to explain the economic shift that occurred in the 1980s I utilized the works of Michael Parenti (1995), author of *Against Empire*, Joseph Stiglitz (2003), Sarah Anderson, John Cavnagh and Lee (2005).

Susan George in her presentation provided the historical background for Neo-liberalism. According to George (1999) neo-liberalism can be characterized by the free trade of goods and services, free circulation of capital and freedom of investment. Neo-liberalism borrows from the economic philosophy of laissez-faire economics, which is the belief that governments should not intervene in matters of the market. Neo-liberalism focuses on free-market methods, fewer restrictions on business operations, property rights and favors the opening of foreign markets. The argument for a free-market economy was the belief that when corporations accumulated wealth, much of it would trickle down to the rest of the public. According to George, over the decade of the 1980's the top 10 percent of American Families increased their average family income by 16 percent, the top 5 percent increased theirs by 23 percent and the top 1 percent increased their incomes

by 50 percent, while the bottom 10 percent of Americans lost 15 percent of their incomes (George, 1999:2). This has resulted in the rich getting richer and the poor getting poorer.

Corporations

The last section of Chapter one takes a closer look at how corporations have been instrumental in shaping global trade policy. I continued to borrow from the works of Anderson, Cavnagh and Lee (2005), Phillip McMichael (1998), and Deborah Garcia Koons (2004) director of the film, *Future of Food*. This section is just a brief introduction to corporate involvement in international policy and how there is a revolving door between the corporate world and the U.S. government.

According to Parenti (1995) Transnational Corporations (TNCs) have lobbied vigorously for a free market economy, free of environmental regulations, free of trade barriers, free of consumer protections, minimum wages, occupational safety, and free of labor unions. In an attempt to liberalize trade many men and women from the corporate world have found themselves inside U.S. governmental agencies, laying the foundation for global policy. For example, the former senior vice president of Cargill, Daniel Amstutz, and former officer of the U.S. department of Agriculture drafted the original U.S. proposal for the 1994 Uruguay Round of GATT. TNCs such as Cargill stand to gain overall from a free trade policy and were key supporters to the GATT multilateral approach to liberalization (McMichael 1998). Corporations are so confident that their interests will be met that in an in-house newsletter distributed by Monsanto's reads: “Agriculture biotechnology will find a supporter occupying the white house next year,

regardless of which candidate wins the election in November" (Koons 2004 film).

According to Wayne Ellwood, "corporations have become the driving force behind economic globalization, wielding more power than many nations" (2001:59).

Conclusion

The goal of this section was to take all of the information that I could gather, and synthesize it in such a way that it would make sense. This is why I decided to first provide the foundation to the global economy by explaining what economic globalization is. Of course this is a contested topic, but through the synthesis of several accredited sociologists and economists, I was able to come up with what I believed is the most tangible explanation. From here I decided that I needed to look at each of the international institutions, individually. I provided a brief history of each of these institutions and how they have conducted business past and present. To understand the current economic and political atmosphere I dedicated a section to defining neo-liberalism and the philosophy behind this economic ideology, who the key players were and who benefits from such a practice. The final section looks at corporate influence in current global politics, how they are key players as well as how they have infiltrated the U.S. government. By providing this foundation to the global economy I feel that the readers of the educational guide will be better equipped with the information they need to understand how our food systems are affected by this current economic system.

The Globalization of Agriculture

In Chapter two, “The Globalization of Agriculture”, I provide a brief history of industrial agricultural and how the IMF, the WB, the GATT and the WTO have promoted industrial agriculture practices around the world though global food policies. I discuss how these policies have affected communities around the world and how these policies were influenced by transnational corporations (TNCs). I also look at corporate claims to ending world hunger, which promotes industrial agricultural practices and free trade policies.

The resources that were of most use to me for chapter two came from a collection of data produced by Vandana Shiva (2000), world-renowned scientist and environmentalist and author of *Stolen Harvest: The Hijacking of the Global Food Supply*, Phillip McMichael (1998) author of *Global Food Politics*, Richard Manning (2004), *Against The Grain: How Agriculture Has Hijacked*, and Andrew Kimbrell (2002) editor of *Fatal Harvest*, a collection of various authors, scholars and activists, which I will introduce throughout this chapter. I also collected information from the official website of the United States Trade Representatives and the Institute for Food and Development Policy. From these resources I was able to create a historical portrait of agricultural practices throughout the twentieth century, how the international institutes were instrumental in promoting the practice of industrial agriculture and the role corporations had in all of this.

A Brief History of Industrial Agriculture

In this section I look at how science and technology have transformed the family farm into the factory farm. I look at how the United States was committed to feeding Europe after WWII, increasing agricultural production significantly. I go on to look at the technological and scientific advancements that contributed to the industrial practice of agriculture, which utilizes pesticides, fertilization, mechanization and monocultures. I also look at the technology of the Green Revolution as well as Genetically Modified Organisms.

The resources that I borrowed from for this section on industrial agriculture are: Ron Kroese (2002), author of *Industrial Agriculture's War Against Nature* an article from *Fatal Harvest*, Joseph Mendelson III (2002), author of *Untested, Unlabeled, and You're Eating It: The Health And Environmental Hazards of Genetically Engineered Food* also an article found in *Fatal Harvest*, Debi Barker (2002), co-director of the International Forum on Globalization and author of *Globalization and Industrial Agriculture*, Andrew Kimbrell (2002), editor of *Fatal Harvest* and once again I took from the works of Phillip McMichael (1998) and Shiva Vandana (2000). I also look the Institute for food and Development Policy.

From the work by Ron Kroese (2002) along with other authors, I was able to see how technological and scientific advances that had taken place during WWII, were transferred over to agricultural technology. According Kroese, by 1945 the message to farmers became “don’t let up, ‘the war isn’t over for the farmers’ the battle for full

production must continue, and thanks to the war, we have some new weapons for you” (2002:23). An article in the November 1946 Reader’s Digest promoted the use of a new chlorinated soil fumigant with the headline that read “Chemical Warfare Invades the Farm.” This launched the era of widespread pesticide use. Factories that had made tanks for the war started tuning out tractors for farms. Wartime planes were converted into foggers and aerial sprayers of pesticides. According to Kroese, “The push toward industrialization and consumerism coupled with the growing demand for food to help feed Europe and Asia, contributed to an eightfold growth in the use of natural gas-derived fertilizers following the war” (2001:24).

In addition to chemical and mechanical advances, scientists were working on plant hybridization. In 1943, the Rockefeller and Ford Foundations began working with the Mexican Government, initiating the first use of plant breeding as foreign aid. The new program became known as the “Green Revolution” and was launched throughout the developing world in the 1960’s and 70’s. The objective was to increase food production as quickly as possible to accommodate the increasing population. According to the Institute for Food and Development Policy (2000), the Green Revolution was promoted by claiming that these new miracle seeds could end world hunger.

These new hybrid seeds combined different plant qualities into a high-yielding, pest resistant crop. According to Kimbrell (2002), these new plants were heavily dependent on fertilizers, pesticides, herbicides, and regulated water through irrigation.

The three most successful crops of the Green Revolution are wheat, maize and rice.

According to the Institute for food and Development Policy,

By the 1990s, almost 75 % of Asian rice areas were sown with these new varieties. The same was true for almost half of the wheat planted in Africa and more than half of that in Latin America and Asia, and about 70% of the world's corn as well. Overall, it was estimated that 40 percent of all farmers in the Third World were using Green Revolution seeds, with the greatest use found in Asia, followed by Latin America (2000:2).

According to Barker (2002), under the Green Revolution model, the food system was transformed into an import/export model. Prior to this system, developing nations primarily grew diverse, local crops for local consumption. Under the new agricultural model farmers were required to grow crops for export. According to Shiva,

Since the World Bank is advising all countries to shift from “food first” to “export first” policies, these countries all compete with each other, and the prices of these luxury commodities collapse. Trade liberalization and economic reform also include devaluation of currencies. Thus exports earn less, and imports cost more. Since the Third World is being told to stop growing food and instead buy food in international markets by exporting cash crops, the process of globalization leads to a situation in which agricultural societies of the South become increasingly dependent on food imports, but do not have the foreign exchange to pay for imported food (2000:15).

Beginning in the 1980's Monsanto began doing further research on genetic manipulations of seeds to create new transgenic seeds with desired characteristics. To create the perfect crop that is pest and disease resistant, as well as nutritionally beneficial, scientists began extracting genetic material from one species and implanting into another to produce a new organism. This became known as Genetic Engineering (GE) or Genetically Modified Organisms (GMO). Biotech industries claim that these new GE crops are pest resistant and require fewer agrichemicals. According to Shiva (2000) this is not true, evidence shows that rather than controlling weeds, pests, and diseases, genetic

engineering increases chemical use and can create superweeds, superpest, and superviruses.

Today Up to 60 percent of processed foods in the U.S. has some GE ingredient and over 70 million acres have been planted with these crops (Mendelson 2002:209). These unlabeled GE foods and food ingredients include soybeans, soy oil, corn, potatoes, squash, canola oil, cottonseed oil, papaya, and tomatoes. According to Mendelson III (2002), legal director for the International Center for Technology Assessment and the Center for Food Safety, these GE foods are inherently unstable and each gene insertion creates the added possibility that formerly nontoxic elements in food could become toxic. He goes on to say that the FDA has been well aware of the “genetic instability” problem for more than a decade. In the early 1990s, FDA scientists warned that this problem could create dangerous toxins in food and was a significant health risk. The U.S. is one of the only developed countries that refused to mandate safety testing or labeling for gene altered produce.

International Institutions

To go one step further I looked at how the IMF, the WB, the GATT and the WTO were instrumental in the spread of an industrial practice of agricultural and the liberalization of the world’s food systems. I also define subsidies, tariffs and import quotas in this section so that the reader can have a better understanding of the policies instituted by these organizations.

In this section there is a significant amount of information that I borrowed from many resources. The authors that were of critical importance for framing this section were Debi Barker (2002), deputy director at the International Forum on Globalization and author of *Globalization and Industrial Agriculture*, Brian Tokar (2004), author of *The World Bank and the Next Green Revolution*, Wole Akande (2002), a freelance journalist and author of the article *How Agricultural Subsidies in Rich countries Hurt Poor*, Phillip McMichael (1998) and Shiva Vandana (2000).

The Green Revolution, which promoted industrial agriculture, was first funded and enforced through the WB and the IMF as “development” projects and latter as part of their “Structural Adjustment Programs” (SAPs). According to Debi Barker (2002), the WB promoted industrial agricultural practices by teaming up governments and financial institutions, which in turn provided loans to huge corporations to distribute hybrid seeds, chemicals and the appropriate mechanized implementations to farmers in developing countries. The WB only gave out loans to those governments who supported the shift to industrial agriculture and would adhere to the structural adjustments mandated by the IMF.

In the 1980’s according to the work of Brian Tokar (2004), the WB shifted its interest to biotechnology and started funding corporations such as Monsanto, which had begun developing new transgenic crops. The WB created an agenda for biotechnology for the next decade and focused on facilitating the adoption of biotech methods in the “developing world.”

Previously at the GATT rounds, agriculture was an exception to the liberalization of trade rules, upon the insistence of the United States. In 1955, agricultural trade was excluded so to protect U.S. farm supply policies from import competition. In the mid-1980s the United States reversed its position, intending to deploy the GATT against agricultural protection (McMichael, 1998). At the end of the Uruguay Round, food was for the first time covered under GATT. The end of the negotiations covered all aspects of food and agriculture under the Agreement on Agriculture (AOA) and all members accepted the expanded rule over agricultural trade and policies. According to Debi Barker, deputy director at the International Forum on Globalization,

The overall goal of the agreement is for countries to reduce or eliminated tariffs (i.e., import taxes), import quotas on commodities, or any other type of “barrier” that would prevent goods from entering a country. Another major aim is to reduce or eliminate subsidies, or direct payments, to farmers (2006:316)

Also included in the Uruguay Round of GATT was the negotiation on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Today under the WTO, TRIPS deals with copyrights, trademarks, industrial design and patents, including the protection of new varieties of plants. The TRIPs agreement requires all WTO members to adopt as their own domestic law, a system of intellectual property rights based on the U.S. model. According to Barker,

Such a global patent system sanctions biopiracy. For example, foreign corporations have the right to take traditional indigenous seed varieties that have been developed by small farmers over centuries, “improve” them by minor genetic alterations, and then patent them. These corporations then have the exclusive right to sell the patented seeds to the communities that once owned them in common and used them freely (2002:318).

Under the TRIPS agreement corporations are able to claim property rights on seeds and plants that have been cultivated by farmers and peasants for centuries. For example, According Shiva, “Corporations like Rice Tec of the United States are claiming patents on Basmati rice. Soybeans, which evolved in East Asia, have been patented by Calgene, which is now owned by Monsanto. Calgene also owns patents on mustard, a crop of Indian origin” (2000:9).

All of these agreements are today institutionalized by the WTO who acts as a tribunal for disputes between member nations on such issues as trade and intellectual property rights. According the Corporate Europe Observatory (1999), at the end of the millennium a number of high-profile trade disputes between the U.S. and the EU have taken place and the WTO dispute settlement body has overwhelmingly ruled in favor of corporate interests over those of people and the environment.

Transnational Corporations

In this last section I examine Transnational Corporations, their influence on global policy and their claims to ending world hunger. The resources I utilized in this section are from Anuradha Mittal (2002), the co-director of the Institute for Food and Development Policy, and author of *The Growing Epidemic of Hunger in a World of Plenty*, David W. Raisbeck (2003), vice chairman of Cargill Incorporated, addressed the World Agricultural Forum in a speech titled *The Role of Agriculture in the Global Economy*, The Office of the United States Trade Representative, The Institute for Food and

Development Policy and Shiva Vandana (2000). These are just a few of the resources I borrowed from that informed this section on TNCs.

According to Edmund Pratt (1996) TNCs have been lobbying and influencing the positions of the most powerful WTO members, and have done the most extreme lobbying in the U.S. Thirteen major U.S. corporations including Bristol Myers Squibb, Dupont, Monsanto, and General Motors, came together to create the Intellectual Property Committee (IPC). The IPC worked to get the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement on the GATT agenda, and were successful in their efforts.

The Argument used by TNCs in an effort to bring down trade barriers, is world hunger. Agribusiness lobbyists claim that increased mechanization of agriculture, synthetic fertilizers, chemical pesticides and GMO's, provide the only hope of feeding the growing population. According to Mittal (2002), TNCs argue that industrial agriculture is the only answer for the more than 800 million people who go hungry each day.

These corporations claim that it is a shortage of food that is causing world hunger, but as shown by the Institute for Food and Development Policy, it is abundance, not scarcity that best describes the world's food supply. Every year, enough wheat, rice, and other grains are produced to provide every human with 3,500, daily calories. In fact, enough food is grown worldwide to provide 4.3 pounds of food per person per day (2006:1-2). Despite what these studies have indicated, corporations such as, Monsanto, Novartis, AgrEvo, DuPont want you to believe they will save the world from hunger with

more of their chemical intensive and Genetically Modified Crops. Cargill's Vice Chairman David W. Raisbeck, in a press release stated that "ending world hunger and reducing poverty requires that current high levels of agricultural protection come down. Subsidized competition and trade-distorting domestic supports in developed countries must be curbed and market access barriers must be brought down everywhere" (2003:2). According to the research of Philip McMichael (1998), Cargill is the largest private company, the eleventh largest company in the world, and has over fifty different businesses from grains, beef packing to fertilizers, peanuts, salt coffee, transportation, steel, rubber, fruits and vegetables. Cargill stands to gain overall from a free trade regime and ending world hunger is just one way to market their product.

Conclusion

I modeled Chapter two "The Globalization of Agriculture" after chapter one. I organized it in such a way that I address each institution in the same order and in the same format so that the reader has some consistency. The first thing I did was look at how agricultural practices have changed over the last half a century, due to technological and scientific advances. I then look at how each international institution was instrumental in the spread of industrial agriculture as well as the trade policies put in place. And I follow up with corporate influence in the liberalization of agriculture and their argument for such practices.

Social Resistance

Chapter three “Social Resistance” looks at several different social movements around the world who are in resistance to global food policy. The following movements are just a few examples of some of the movements that are rising up against neoliberalism, global food policy and the industrialization of agriculture: La Vía Campesina, Brazils Rural Landless Workers Movement (MST), Navdanya, Slow Food, and Community Supported Agriculture. Although these movements are rooted in diverse political atmospheres with diverse political histories, these movements are all in opposition to the globalization of agriculture.

The resources that I utilized in this section are the official websites of La Vía Campesina, Brazils Rural Landless Workers Movement, Navdanya, and the Slow Food Movement. I also looked to the works of Elizabeth Henderson and Robyn Van En (1999) authors of *Sharing The Harvest: A Guide to Community Supported Agriculture*, Peter Rosset of the Institute for Food and Development Policy, Carlo Petrini founder of the Slow Food Movement, Annette Aurélie Desmarais (2005), assistant professor of Justice Studies at the University of Regina, Canada, and author of *United in the Vía Campesina* and Meghan L. Holmes (2008) author of *Slow Food: Inchng towards Food Sovereignty*. The following highlights the work that each of these movements is doing within in their communities, their countries to combat current global food policies.

La Vía Campesina

According to Megan Holmes, “La Vía Campesina, is a transnational peasant and farm movement vowed to collectively resist the globalization of agriculture and to ensure that the voices of those who produce the world’s food will be heard” (2008:2). Vía Campesina is made up of 149 organizations from 56 countries and their memberships consist of peasants, farmers, landless, women, indigenous people, rural youth and agricultural workers. The main goal of Vía Campesina is to build a peasant-based alternative model of agriculture through agrarian reform, food sovereignty, biodiversity, genetic resources, gender relations, sustainable agriculture, migration and migrant farm workers’ rights, and human rights (Desmarais 2005).

Brazil's Landless Workers Movement

Brazil's Landless Workers Movement (MST) is the largest social movement in Latin America, with an estimated 1.5 million landless members organized in 23 out of 27 states. The MST was officially founded 1984 as a national organization. The goal of the MST is to carry out land reform by occupying unused land forcing the Brazilian government to redistribute millions of acres of agricultural land to thousands of landless families. Land occupations are rooted in the Brazilian Constitution, which says that land that remains unproductive should be used for a “larger social function.” The MST has won land titles for more than 350,000 families in 2,000 settlements as a result of MST actions. Once land occupations have occurred, the MST establish cooperative farms,

construct houses, schools and clinics for children and adults, and promote indigenous cultures, a healthy and sustainable environment, and gender equality. According to the MST's webpage, "The MST's success lies in its ability to organize and educate. Members have not only managed to secure land, therefore food security for their families, but also continue to develop a sustainable socio-economic model that offers a concrete alternative to today's globalization that puts profits before people and humanity" (Movimento dos Trabalhadores Rurais Sem Terra Website 2003).

Navdanya

The Navdanya movement was founded in India by world-renowned scientist and environmentalist Dr. Vandana Shiva. Navdanya has a membership of over 70,000 farmer families in thirteen states of India, who are dedicated to preserving biodiversity, saving and sharing seeds and practicing chemical-free agriculture. As stated on its webpage "Navdanya is actively involved in the rejuvenation of indigenous knowledge and culture. It has created awareness on the hazards of genetic engineering, defended people's knowledge from biopiracy and food rights in the face of globalization" (Navdanya Website 2008).

The Slow Food Movement

The Slow Food movement started in 1989 in response to the establishment of a McDonald's restaurant in the famous Piazza di Spagna in Rome. The founder Carlo Petrini, a food journalist, became concerned about what fast food would do to the local

food culture. Slow Food is a non-profit organization committed to counteracting the disappearance of local food traditions and challenging the fast food culture. According to their web page, “We believe that food we eat should taste good; that it should be produced in a clean way that does not harm the environment, animal welfare or our health; and the food producers should receive fair compensation for their work” (Slow Food Website 2008).

Community Supported Agriculture

The Community Supported Agriculture (CSA) Movement started in the United States in 1986 at two farms simultaneously, Indian Line Farm in Massachusetts and Temple-Wilton Community Farm in New Hampshire. These two farms borrowed their practices from farmers in Switzerland and Germany who had asked their customers to pay a share of the farm’s annual production costs in exchange for a weekly share of produce. CSA is a relationship of mutual support and commitment between local farmers and community members who pay the farmer an annual membership fee to cover the cost of the farm. In turn, members receive a weekly share of the harvest during the local growing season and share in the inherent risks and potential bounty of the farm. According to Elizabeth Henderson, of Indian Line Farm (1999) “The goal of CSA is to reconnect people with the land that sustains them” (1999:5). Today, the U.S. is home to at least 1,700 CSA farms.

In response to neo-liberal policies, citizens around the world have come together in resistance. Working families, students, farmers, environmentalists and activists have

taken to the streets, created alternatives within their communities and sparked dialogue around the world. According to Peter Rosset, “As corporate-driven economic globalization and runaway free trade policies devastate rural communities around the world, farmers’ organizations are coming together around the rallying cry of food sovereignty” (2003:1).

Conclusion

My goal for chapter three “Social Resistance” was to look at several various social movements who are resistance to current global food policy. These movements range from International movements to regional movements, but all agree that our current food system is a hazard to our communities, our health and our environment. I wanted the reader to know that these movements are not only found in the Third World, but also in developed countries like the U.S. How I went about explaining each movement was through their voices. I went directly to the official websites or to information put out by each movement. Although I only provide a small window into these movements I felt that this was the only way to I could relay this information.

Conclusion

From the works of the authors, scholars, activists, economists and politicians mentioned above I was able to synthesize the information to create a story of the global economy past and present, how food systems are affected by our current global policies and those who are in resistance to current global food policy. The goal of this education

guide is to make this information accessible and comprehensive for community. Too often does the work we do in Universities stay in academia and as a practicing sociologist I felt that it was my job to bridge my work in academia with the larger community. I feel that this guide can be utilized as a tool on and off of the farm to educate the public on the global economy, global food policies and responses to these policies. From this I hope that the Redwood Roots community and beyond will be better equipped to make informed decisions about the food they buy, where it comes from, and the types of food they eat.

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APPENDIX A: THE GLOBALIZATION OF
AGRICULTURE AND SOCIAL RESISTANCE

The Globalization of Agriculture



By
Amanda Beatty

and Social Resistance

Introduction

Today, within our current global economy, food has become a target of neo-liberal policies, which has transformed how farmers practice agriculture and the types of food they grow. In the pursuit for free-trade, the world's food supply has been placed in the hands of transnational corporations, who have pushed for an industrial practice of agriculture in place of traditional knowledge. Today small family farmers and subsistence farmers are being threatened by an industrial practice of agriculture, which has transformed much of the traditional farmlands of the world into large corporate farms for the mass production of cash crops. Neo-liberal policies have allowed corporations to seize the world's food supplies and place it on the global market to be sold for profit. The result of this has been the displacement of rural peoples to urban centers, increased poverty, starvation and the degradation of our ecosystems.

In opposition to the policies that have arisen under globalization, there is much resistance. This resistance comes in all different forms across the world and includes such movements as, La Vía Campesina, Brazil's Rural Landless Workers Movement, Navdanya, Slow Food and the Community Supported Agriculture (CSA) movement. These are just a few of the movements in opposition to current global food policies but all of these movements unify in the injustices of global food policy and have provided a voice for those who have been marginalized, as well as providing alternatives to the current agricultural practices. For the past four years I have been working at a local CSA, Redwood Roots Farm, located in Arcata, California. It was this work that ignited my interest in global food policy and social movements.

While working with Janet Czarnecki, the owner and head farmer of Redwood Roots Farm, we found that many people had questions about industrial agriculture and global food policy. Because of Redwood Roots' dedication to education we felt that these questions should be answered. This is when we came up with the idea for an educational guide on the topics of globalization, global food policy, and social resistance.

The goal of this project is to educate our community so that they have a better understanding of globalization, the institutions that govern global trade, global food policy, and those around the world who are in resistance to these policies. From this we hope that our community will be better equipped to make informed decisions about the food they buy, where it comes from, and the types of food they eat.

The guide is split into three chapters. Chapter 1 "What is Globalization?" provides a brief overview of Globalization and the international institutes that govern global trade; The World Bank (WB), The International Monetary Fund (IMF), The General Agreement on Tariffs and Trade (GATT) and The World Trade Organization (WTO). I also address the economic ideology of neo-liberalism and free-trade as well as

corporate influence within our current global economy. Chapter 2 “The Globalization of Agriculture” provides a brief history of industrial agricultural and how the IMF, the WB, the GATT and the WTO have promoted industrial agriculture practices around the world though global food policies. I discuss how these policies have affected communities around the world and how these policies were influenced by transnational corporations (TNCs). And Chapter 3 “Social Resistance” looks at several different social movements around the world who are in resistance to global food policy.

What is Globalization?

Economic Globalization consists of the flow of goods and services, capital and people across national borders. Although globalization has occurred for centuries in each of these realms it is going through a period of rapid change.¹

Globalization is a concept that has been highly debated within the academic, economic, political and social world, however all agree that this concept is acquiring critical importance for the twenty-first century. Globalization has become the popular terminology for explaining the increasing integration among our economies, political ideology and social relations that has occurred over the last 50 plus years around the world. Often times it is referred to, to explain the effects of trade, particularly trade liberalization or free trade policies. According to Joseph Stiglitz, the former Chief Economist and Senior Vice President of the World Bank, globalization can be seen as:

The closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders.²

For example, with the advancement of communications, transportation and computer technology, the movement of goods, services, and people across nations has drastically increased, and has transformed our global economy. Today almost anywhere you go one can find a McDonalds, drink a Coca-Cola, and listen to Hip-hop. We can travel virtually anywhere by planes, trains and automobiles and we can communicate with someone instantaneously on the other side of the world through e-mail. Globally, standardized products are now sold and welcomed everywhere, from food, clothing, music, television and automobiles. According to Debi Barker, executive director of the International Forum on Globalization, “diversity was replaced by uniformity, and self-reliance was replaced by dependence.”³ Although globalization exposes us to all of these rich and exotic places and people, our global economy is becoming homogenized, that is we are being sold the same products, the same foods, the same clothing, the same music and one culture, western culture.

Globalization is not a new phenomenon, rather it is a historical process of thousands of years of trade, and most recently the spread of capitalist relations around the globe. What makes globalization differ from previous stages of capitalism is at the rate it is spreading, and the displacement of power from governments to supranational institutes, such as, the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Organization (WTO).⁴ According to Wayne Ellwood, editor for the New Internationalist Magazine and author of the *No-Nonsense Guide to Globalization*, globalization is a new word, which describes an old process. Ellwood claims that that the

integration of the global economy began five centuries ago during the European colonial era, but this processes is accelerating at an astonishing rate with the explosion of computer technology, the dismantling of barriers to the movement of goods and capital, and the expanding political and economic power of multinational corporations.⁵ With the creation of the IMF, the WB, the WTO, and the persistent pressure and drive from corporations, most countries in the world have substantially lifted their barriers to trade and adopted a free-market economy, that is trade flows freely between or within countries without the imposition of government restrictions. All of this is possible with the advancements in technology, which makes it possible to do business in Hong Kong from the comfort of one's office in New York.

This concept of globalization and the phase of capitalism with which we find ourselves, has transformed our global economy and opened up markets that we could have never imagined. In our current stage of capitalism, no country or region remains outside of world capitalism, but rather, globalization is unifying the world into a single global system.⁶ Today the three institutes that govern our global economy the IMF, the WB, and the WTO have the power to go above and beyond any nation in pursuit of free trade. These institutions dictate to the world how we are to conduct trade and business. The trend toward globalization has been accompanied by a continuing tendency toward corporate concentration, and the result is that a small number of large corporations control the basic commodities we use everyday. The consequences have been a disproportionate amount of wealth from developing countries to industrial nations, a widening gap between the rich and poor, social unrest and environmental degradation.

U.S. Domination and the Global Agenda

The Globalization agenda began to take form after World War II. The United States was at an advantage economically, and utilized its position to redefine international economic policy. With the British power collapsing during the war, the U.S. saw an opportunity to move in and lead the world toward a globalized economy. Because the U.S. emerged from the war with as much as half the globe's measured industrial production and four-fifths of its gold reserves, U.S. negotiators were well positioned to ensure that the rules favored U.S. dominance.⁷ This was revealed by Howard Zinn in his book the *Twentieth Century A Peoples History*, which quotes Cordell Hull, Roosevelt's Secretary of State, as saying:

Leadership toward a new system of international relationships in trade and other economic affairs will devolve very largely upon the United States because of our great economic strength. We should assume this leadership, and the responsibility that goes with it, primarily for reasons of pure national self-interest.⁸

In July of 1944, delegates from 44 nations met in Bretton Woods, New Hampshire to outline the framework for the postwar global economy. Out of this meeting the International Monetary Fund (IMF) and the World Bank (WB) were created. These institutions were created to finance the rebuilding of Europe after the war, to promote global trade and to put in place a global economic system. The General Agreement on Tariffs and Trade (GATT) came shortly after, outlining the rules and regulations for global trade. It has been through the creation of these institutions that trade on a global scale began, and it has been U.S. policy that has influenced how we conduct global trade. According to Stiglitz, “The West has driven the globalization agenda, ensuring that it garners a disproportionate share of the benefits, at the expense of the developing world.”⁹

The post WWII vision was to create public international institutions to anchor each of the three pillars of global economic activity:

Production: World Bank

Finance: International Monetary Fund

Trade: GATT, succeeded in 1995 by the WTO¹⁰

The World Bank (WB)

The World Bank (WB) was established first to help with the reconstruction after the war, and second to assist in long-term production in poorer countries. According to the World Bank, “The Bank’s mission evolved from a facilitator of post-war reconstruction and development to its present day mandate of worldwide poverty alleviation.”¹¹

The World Bank has traditionally been known for funding “development” projects: long term, low-interest loans for infrastructure projects like dams, power plants, education systems and funding agricultural “modernization” projects. Although this may sound good, in reality these projects have displaced millions of people, destroyed natural ecosystems, and forced millions to seek refuge in urban centers. Increasingly, World Bank loans have been attached to policy reforms in the countries that have been given loans.

Over the past sixty years the World Bank has financed at least 550 dams valued at \$86 billion. These projects have displaced millions of people with costly environmental effects.¹² The Institute for Policy Studies has calculated that between 1992-2003, the World Bank financed fossil fuel extraction and power plant projects that ultimately will release over 50 billion tons of carbon dioxide into the atmosphere, making them the leading contributor to green house gas emissions.¹³

The International Monetary Fund (IMF)

In its inception the International Monetary Fund (IMF) had the task of ensuring global economic stability by providing financial assistance in the form of short term loans to countries that were experiencing serious financial difficulties. The IMF was supposed to facilitate the expansion and balanced growth of international trade, and contribute to the promotion and maintenance of high levels of employment and real income.¹⁴ According to Joseph Stiglitz,

The IMF in its original conception was based on a recognition that markets often did not work well, that they could result in massive unemployment and might fail to make needed funds available to countries to help them restore their economies. The IMF was founded on the belief that there was a need for collective action at the global level for economic stability.”¹⁵

The IMF is a public institution; established with money provided by taxpayers around the world, it reports to the ministries of finance and to the central banks of the governments of the world. The IMF is not obligated to report directly to citizens who finance it, or those whose lives it affects.¹⁶ The voting power within the IMF is based on the capital contributed by individual nations, securing the dominance of rich nations, such as the U.S. Today attached to IMF loans are structural adjustments that governments must adhere to in order to receive a loan, typically this consists of a reduction of funds towards education and healthcare, the elimination of environmental restrictions and the privatization of state owned enterprises.

The General Agreement on Tariffs and Trade (GATT)

Around the same time of the formation of the WB and the IMF, governments were also discussing the creation of an institution to govern world trade. The proposed institution was to be called the International Trade Organization (ITO), and was to outline the rules and regulations for trade between countries. The goal of the ITO was to balance the liberalization of global trade with a social component of stimulating full employment. It also set the principle that poorer nations needed special treatment in trade in order to

close the gap between rich and poor nations. The ITO was agreed upon at the United Nations Conference on Trade and Employment in Havana 1948, but was blocked by the U.S. Senate. The only element that survived from the proposed ITO was the General Trade Agreement on Tariffs and Trade (GATT), which was agreed upon at the Bretton Woods Conference on Trade and Employment in Havana, Cuba in 1947. The GATT retained its mission to reduce barriers to trade in goods and services but dropped its social mandate for full employment and special treatment to developing nations.¹⁷

The GATT, not unlike a treaty, was a set of negotiated rules and regulations on trade in industrial goods agreed upon by member nations. Its goal was aimed at reducing national trade barriers. There have been several meetings throughout the time of its existence, called rounds, which have negotiated new rules to be applied to the GATT. The last seven rounds of negotiations have reduced tariffs from 40-50 percent to 4-5 percent.¹⁸

The final round of the GATT negotiations, the 1986-1994 Uruguay Round, resulted in the largest negotiation mandate in trade history. The Uruguay Round resulted in the creation of a new set neo-liberal trade rules to regulate the new global economy. The first set of rules were freedom of investment and capital movements, second was the liberalization of services, which included banks, third was intellectual property rights and the fourth was the free movement of goods. The end of the Uruguay Round resulted in the creation of the World Trade Organization (WTO) to institutionalize this new “free trade” agenda.

The World Trade Organization (WTO)

The World Trade Organization (WTO) came into existence in 1995, as a result of the Uruguay Round of GATT. The WTO is the successor to the GATT, and as a successor, the WTO solidifies suggested policy into permanent enforced standards. As the GATT encouraged voluntary trade agreements between countries, the WTO makes it law, enforceable by economic sanctions or financial penalties. Whereas the GATT focused on reducing tariffs, the WTO also works to eliminate “non-tariff barriers”, which include environmental, health, and other public-interest regulations that are considered impediments to trade. The WTO is made up of panels composed of elected trade specialists who act as judges over economic issues, placing them beyond the reach of national sovereignty and popular control. They are confirmed in secret by a non-elective body.

As stated on its web page “the World Trade Organization (WTO) is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible.”¹⁹ To ensure this promise of free trade the WTO acts as a tribunal for disputes between

member nations on the issues of trade. The WTO does not set the rules; rather it sets the platform for negotiations, and acts as the global police. The WTO has independent jurisdiction, its rules and rulings are binding on all members, and it has the power to sanction, to overrule state and local powers, and to override national regulatory powers. It has the power to prevent or weaken the environmental, social, consumer, and labor laws of any nation if they restrict the flow of goods and services.

Today the WTO under GATT negotiations has branched out from goods to also include services, agriculture, intellectual property rights, financial institutions and insurance as part of the free market economy. As stated by Leif Utne of Utne magazine “One thing is for sure is that the WTO has had a greater impact on the global economy than any other institution.”²⁰ Although the WTO includes 150 member countries, it’s the richest nations that make the key decisions. These countries are Canada, France, Germany, Italy, Japan, Russia, the United Kingdom and the United States; these countries make up the Group of 8 (G8). The G8 meet annually to discuss economics, law, labor, development, trade, terrorism and much more. Strong pressures from these countries often force developing countries into accepting deals against their interests.

Neo-Liberalism in the 1980's

The 1980's represents the resurgence of laissez-faire economics; now known as Neo-liberalism. Neo-liberalism borrows from the economic philosophy that governments should not intervene in matters of the market. Neo-liberalism focuses on free-market methods such as the elimination of tariffs, subsidies and quotas, fewer restrictions on business operations, property rights and favors the opening of foreign markets. Neo-liberalism can be characterized by the free trade of goods and services, free circulation of capital and freedom of investment.²¹

Main Points of Neo-Liberalism

- **The rule of the market**, freedom for capital, goods and services, where the market is self-regulating allowing the “trickle down” notion of wealth distribution. It also includes the deunionizing of labor forces and removals of any impediments to capital mobility, such as regulations. The freedom is from the state, or government.
- **Reducing public expenditure for social services**, such as health and education, by the government.
- **Deregulation**, to allow market forces to act as a self-regulating mechanism.
- **Privatization of public enterprise**, everything from water to even the internet.
- **Changing perceptions**, of public and community good to individualism and individual responsibility.²²

This liberal economic philosophy was first practiced in the U.S. throughout the 19th century, ending with the U.S. stock market crash of 1929. After the U.S. stock market crash, Keynesian economics was adopted as the antidote to Laissez-fair economics. John Maynard Keynes pushed for governmental regulations on business, and believed that for an economy to grow, full employment was essential, which could only be achieved if governments and central banks intervened.²³ Keynesian economics was adopted and utilized by President Roosevelt's New Deal, and was the popular ideology until the 1980's.

In the 1980's, under the leadership of the Prime Minister of the United Kingdom, Margaret Thatcher, and the President of the United States, Ronald Reagan, neo-liberalism became the economic ideology of the times. In the U.K. Thatcher promoted her program "TINA", which stood for "There is No Alternative". The central value of her program was competition, competition between nations, regions, firms and individuals. Thatcher pushed for the privatization of state owned industries, advocated for a free market economy, opposed trade unions and pushed to dismantle the Welfare State.²⁴ Reagan followed in her pursuit and promoted a supply-side economic ideology, otherwise known as trickle down economics. As stated in Michael Parenti's book *Against Empire*, the conservative refrain goes as follows:

If left to its own devices, the free market would provide prosperity for all who are willing to work. Liberated from the irksome and artificial constraints of government regulations and heavy taxes, private investment will grow, bringing greater productivity, more jobs and income for everyone, and less government.²⁵

It was believed that when corporations accumulated wealth, much of it would trickle down to the rest of the public. They carried out this plan by cutting welfare programs, at the same time as eliminating and weakening numerous government regulations, making it easier for corporations to do business. According to Susan George, author and political scientist, over the decade of the 1980's the top 10 percent of American Families increased their average family income by 16 percent, the top 5 percent increased theirs by 23 percent and the top 1 percent increased their incomes by 50 percent while the bottom 10 percent of Americans lost 15 percent of their incomes.²⁶ According to George, "America is one of the most unequal societies on earth, but virtually all countries have seen inequalities increase over the past twenty years because of neo-liberal policies"²⁷

To move this neo-liberal ideology forward, Reagan looked to reform the IMF and the WB. Originally the Bretton Woods system was designed to stimulate international economic activity without intervening in a nation's domestic policy. Today these institutions ignore the laws of individual nations and dictate structural adjustments, which override domestic policy. This shift occurred within the WB in 1982 with the appointment of a new president and chief economist, Ann Krueger. Krueger viewed

government as a problem and believed that free markets were the sole solution to the problems facing developing countries.²⁸ The WB shifted from project loans to policy loans aimed at restructuring local economies and integrating them into the global economy. The IMF began to focus more on ensuring that private investors and banks were shielded from large losses when their developing-country investments went bad, rather than helping governments avoid currency crises.²⁹ Originally these institutions were to work within the framework of the nation-state, now they made it their business to adjust governmental restrictions on trade barriers environmental regulations, education programs and social services all in the pursuit of free trade. The WB and the IMF now work as a team to determine who gets loans, and under what conditions under its Structural Adjustment Programs.

Structural Adjustment Programs (SAP)

Structural Adjustment Policies (SAP) are economic policies that countries must follow in order to qualify for World Bank and IMF loans. Structural adjustments imposed by the WB and the IMF require poor countries to reduce governmental restrictions on trade barriers, environmental regulations, education programs and social services. Also part of the SAPs agreement, countries are required to open their doors to foreign investment, privatize state owned enterprises, and change to export-oriented policies. These restrictions are put into place to ensure debt repayment and economic restructuring, and at the same time furthering the neo-liberal agenda. According to the World Bank Fact Sheet, put out by Corporate Watch, “The results from Structural Adjustment Programs have not lessened poverty where it has been applied; in fact, it has contributed to the suffering of millions and causing widespread environmental degradation. Since the 1980’s, structural adjustments have helped create a net outflow of wealth from the developing world, which has paid out five times as much capital to the industrialized countries of the North as it has received.”³⁰

Standard World Bank/IMF Loan Conditions

POLICY

- Reduce deficits by cutting spending
- Devalue currency and increased exports
- Liberalize financial markets
- Cut price subsidies for staples

IMPACT

- Less money for education, health care and the environment
- Acceleration of natural resource extraction for export, increased global pressures to compete by cutting prices and wages.
- More volatile short-term investment.
- Skyrocketing prices on rice, cooking oil,

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| <ul style="list-style-type: none"> • Increase interest rates to attract foreign capital • Privatize state-owned enterprises • Weaken labor standards | <p>and other necessities.</p> <ul style="list-style-type: none"> • Domestic business bankruptcies, crisis for individuals with debts. • Layoffs and often reduced access to services for the poor. • Downward pressure on wages working conditions.³¹ |
|---|---|

Corporate Control

The 1980's represented a time when Transnational Corporations (TNCs) rose to the occasion to assert their dominance on the global market. They did this by restructuring multilateral and national institutions to serve their best interest. They influenced global negotiations to meet their demands for freer trade, and pushed to open public and non-market spheres. In short, they pushed for a neo-liberal agenda. Today TNCs are the world's biggest economic institutions, and their involvement at international political negotiations has encouraged the rise of global corporate economic power. In an effort to reduce trade barriers, transnational corporations have lobbied extensively for a liberalized global economy. Their efforts helped shape the Uruguay Round of the GATT negotiations, WTO policy, the North American Free Trade Agreement (NAFTA), the Central American Free Trade Agreement (CAFTA) and many more.

In an effort to reduce trade barriers, TNCs have lobbied vigorously for a free market economy, free of environmental regulations, free of trade barriers, free of consumer protections, minimum wages, occupational safety, and free of labor unions.³² In an attempt to liberalize trade many men and women from the corporate world have found themselves inside U.S. governmental agencies, laying the foundation for global policy. For example, Daniel Amstutz, the former senior vice president of Cargill and former officer of the U.S. Department of Agriculture drafted the original U.S. proposal for the 1994 Uruguay Round of GATT. TNCs such as Cargill stand to gain overall from a free trade policy and were key supporters to the GATT multilateral approach to liberalization.³³ Corporations are so confident that their interests will be met that in an in-house newsletter distributed by Monsanto reads: "Agriculture biotechnology will find a supporter occupying the white house next year, regardless of which candidate wins the election in November."³⁴ According to Wayne Ellwood, "Corporations have become the driving force behind economic globalization, wielding more power than many nation-states."³⁵

Top 200 corporations vs. Countries

- Of the 100 largest economies in the world, 51 are corporations; only 49 are countries (based on a comparison of corporate sales and country GDPs). To put this in perspective, General Motors is now bigger than Denmark; DaimlerChrysler is bigger than Poland; Royal Dutch/Shell is bigger than Venezuela; IBM is bigger than Singapore; and Sony is bigger than Pakistan.
- The 1999 sales of each of the top five corporations (General Motors, Wal-Mart, Exxon Mobil, Ford Motor, and DaimlerChrysler) are bigger than the GDP's of 182 countries.
- The Top 200 corporations' combined sales are bigger than the combined economies of all countries minus the biggest 10 (*calculated using GDP data from the WB. World Development Report 2000, Table 12. p.297-297. This table includes 131 countries and excludes 74 additional economies that have sparse data or populations of less than 1.5 million.*)³⁶

Conclusion

Today the result of how these institutions have conducted business is evident, by the instability of the global economy, the millions of people homeless, starving and marginalized, the massive demonstrations, protests, terrorist activities and wars. We live in an unstable world, which was caused by the pursuit to secure natural resources and global markets. The mission of the IMF states that it is working to “foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty.”³⁷ The IMF has failed in its mission. It has not done what it originally set out to do, which was to provide funds for countries facing an economic downturn, to enable the country to restore itself to close to full employment. Instead it pushed for trade liberalization at the expense of economic stability. According to Joseph Stiglitz “Every emerging market that liberalized its capital market has had at least one crisis. Many of the policies that the IMF pushed, in particular, premature capital market liberalization, have contributed to global instability. And once a country was in crisis, IMF funds and programs not only failed to stabilize the situation but in many cases actually made matters worse, especially for the poor.”³⁸

Because of the policies of the IMF, the WB, the WTO, and of the relentless pressure from corporations, the gap between the rich and the poor is growing rapidly, this is in spite of their claims that trade liberalization is supposed to decrease poverty. In fact quite the opposite has happened. According to studies conducted by the World Bank, Stiglitz states “A growing divide between the haves and the have-nots has left increasing numbers in the third world in dire poverty, living on less than a dollar a day despite repeated promises of poverty reduction made over the last decade of the twentieth century, the actual number of people living in poverty has actually increased by almost 100 million.³⁹ This occurred at the same time that total world income increased by an average of 2.5 percent annually.”⁴⁰

The Globalization of Agriculture

For thousands of years, small farmers everywhere grew food for their local communities. For those farmers, growing food meant planting diverse crops in healthy soil, recycling organic matter, and following nature's rainfall patterns.

Good farming relied upon the farmer's accumulated knowledge of the local environment. Through long standing practices and use of selected resistant varieties, farmers had achieved effective balances that prevented or reduced crop losses.⁴¹

Mittal, Anuradha

Since the inception of the World Bank (WB) and the International Monetary Fund (IMF), industrial agriculture has been pushed onto developing countries as "development" projects, "structural adjustments programs" and the "Green Revolution". The 1986-1994 Uruguay Round of the General Agreement on Tariffs and Trade (GATT) liberalized agriculture through the Agreement on Agriculture (AOA). The AOA opened up markets to the world's food supply by reducing and eliminating tariffs, import quotas on commodities and legalized the dumping of genetically engineered (GE) foods onto the global market. Under the World Trade Organizations (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS), corporations are able to patent life forms, such as seeds, while making it illegal for farmers to save and exchange seed. The WTO enforces these laws by punishing any and all countries that challenge these global policies. In order to secure markets there have been several trade agreements between the U.S, Canada, Mexico, Central America, Australia, and China. These agreements have compromised local knowledge, culture and food security, while pushing more and more people off their land and into poverty.

The following is a brief summary of how agriculture became liberalized and placed on the global market through corporate pressures, and the institutions that govern global trade: The WB, the IMF, and the WTO. Food, which is one of our most basic needs to survive, has become a commodity that can be bought and sold on the global market for profit. Today the food we eat has traveled from farm to plate an average of 2000 miles. Most of this food has gone through processing, packaging and contains ingredients we have never heard of. We live in a world where our food systems have been placed on the global market to be sold as a commodity.

Brief History of Industrial Agriculture

Not unlike our global economy, agriculture practices have changed drastically in the last century with the adoption of science, technology and the development of capital-intensive farming operations. Today small family farmers and subsistence farmers are being threatened by an industrial practice of agriculture, which has transformed much of

the traditional farmlands of the world into large corporate farms for the mass production of “cash crops” to be sold on the global market. Industrial agriculture requires the use of off the farm inputs, such as, pesticides, insecticides, fossil fuels, hybrid seeds, genetically modified seeds, mechanization and the mass production of monocultures for export. The industrial model is based on an import/export model. This has forced developing nations, which primarily grew diverse, local crops for local consumption, to grow crops for export. Big Agribusiness, claims that industrial agriculture will decrease poverty and world hunger. Although it has increased food production, it has resulted in the displacement of rural peoples to urban centers, increased poverty, and has contributed to the degradation of our ecosystems.

World War II

How did we go from the small family farmer to the corporate owned farm? Once again World War II represents the era of rapid change in our global economy as well as in agricultural practices. Starting at the time of WWII the demand for food and fiber increased dramatically, escalating agricultural production significantly in the U.S. for the wartime effort. The demand for American agricultural goods continued to remain high after the war as the Marshall Plan committed the United States to the role of rebuilding and feeding war torn Europe.

Not only did the wartime effort commit the U.S. to the mass production of food, the war also contributed to new technological advancements in agricultural practice. WWII technology led to advancements in mechanization such as large-scale irrigation, fertilization, pesticides, as well as a cheap source of nitrogen left over from bomb manufacturing. These new modern tools for farming quickly became commercial farming inputs, which were supplied by corporations giving them more money and control of the agricultural sector. This was a far cry from traditional methods of farming that included, seed saving, composting, crop rotation and plant diversity.

After WWII, technology and the spirit of the war was transferred over to the farm. By 1945 the message to farmers became “don’t let up, ‘the war isn’t over for the farmers’ the battle for full production must continue, and thanks to the war, we have some new weapons for you.”⁴² These ads were paid for by major corporations, which promoted the use of new chemical technologies utilized in the war. The battlefield became the farm, and the enemy, insects. This launched the era of widespread pesticide use, such as DDT and 2, 4-D. DDT was utilized in the war to combat malaria-bearing mosquitoes for soldiers. After the war, DDT became widely available to farmers as an insecticide. In 1972 DDT was banned in the U.S, due to its environmental impacts on birds and insects and its link to cancer in humans. 2, 4-D, an organophosphate combined with nerve gas, was used in German concentration camps during the war and became widely used as an insecticide in agricultural practices. 2, 4-D is still extensively used as a weed killer.

Chemical technology was just one part of the new farm arsenal, war artillery was transformed into farm mechanizations. For example, factories that had made tanks for the war started turning out tractors for farms. Wartime planes were converted into foggers and aerial sprayers of pesticides. According to Ron Kroese, founder of the Land Stewardship Project, claims “The push toward industrialization and consumerism coupled with the growing demand for food to help feed Europe and Asia, contributed to an eightfold growth in the use of natural gas-derived fertilizers following the war.”⁴³

The Green Revolution

In addition to chemical and mechanical advances, scientists were also working on plant hybridization. In 1943, the Rockefeller and Ford Foundations began working with the Mexican Government, initiating the first use of plant breeding as foreign aid. This new program became known as the “Green Revolution,” and was launched around the world in the 1960’s and 70’s. The objective was to increase food production as quickly as possible to accommodate the increasing population. The Green Revolution was promoted by claiming that these new miracle seeds could end world hunger.⁴⁴

These new hybrid seeds combined different plant qualities into high-yielding, pest resistant crops that were heavily dependant on fertilizers, pesticides, herbicides, and regulated water through irrigation.⁴⁵ Today these high yielding varieties include most major crops grown in the world, including sorghum, maize, cassava, millet and beans. The three most successful crops of the Green Revolution are wheat, maize and rice. These crops are grown in surplus worldwide creating a situation that has resulted in the world to rely on three grain crops for more than two-thirds of its nutrition.⁴⁶ According to the Institute for Food and Development Policy

By the 1990s, almost 75 % of Asian rice areas were sown with these new varieties the same was true for almost half of the wheat planted in Africa and more than half of that in Latin America and Asia, and about 70% of the world’s corn as well. Overall, it was estimated that 40 percent of all farmers in the Third World were using Green Revolution seeds, with the greatest use found in Asia, followed by Latin America.⁴⁷

The Green Revolution did have its benefits; it did stave off famine, and did produce millions of extra tons of grain a year, but the food did not stay within the communities that grew it. Under the Green Revolution model, the food system was transformed into an import/export model. Prior to this new system, developing nations primarily grew diverse, local crops for local consumption. Under the new agricultural model farmers were required to grow crops for export.⁴⁸ According to Vandana Shiva, world-renowned scientist and activist,

Since the World Bank is advising all countries to shift from “food first” to “export first” policies, these countries all compete with each other, and the prices of these luxury commodities collapse. Trade liberalization and economic reform also include devaluation of currencies. Thus exports earn less, and imports cost more. Since the Third World is being told to stop growing food and instead buy food in international markets by exporting cash crops, the process of globalization leads to a situation in which agricultural societies of the South become increasingly dependent on food imports, but do not have the foreign exchange to pay for imported food.⁴⁹

To convert local farmers to industrial practices of agriculture, corporations with the support of the IMF and the WB, gave small farmers free or discounted hybrid seeds accompanied by the chemicals needed to get them started. Once farmers had converted their production to grow for the global market they were responsible for keeping up with the increasing cost of seed, chemicals and mechanizations. According Andrew Kimbrell, editor of *Fatal Harvest*,

Advances in industrial agriculture have put millions of the world’s farmers in a fatal bind, as they spend ever more in production costs, yet receive ever less income. This has resulted in mass starvation in the rural communities, epidemics of farmer suicides, and the annihilation of farm communities throughout the globe.⁵⁰

By the 1970’s the Green Revolution had replaced traditional farming practices of millions of Third World farmers. Industrial agriculture significantly increased the cost of farming, forcing many farmers to have to abandon their land and their livelihoods. Currently, more than half a billion rural people in Third World countries have become landless or do not have sufficient land to grow their own food, or the money to buy that food.⁵¹ Most of this land was swallowed up by large landowners and corporations.

Critics of the Green Revolution argue that the scientists and policy makers failed to look at the root of causes of hunger, and claim that it’s not a matter of the amount of food produced rather it is a matter of buying power. The result of the Green Revolution has been the increase of a few crops sold on the global market, in place of a diversity of food crops grown for local consumption.

Genetically Modified Organisms (GMO)

Beginning in the 1980’s Monsanto’s continued research on genetic manipulations of seeds. These new transgenic seeds had improved characteristics, which helped create crops that are pest and disease resistant, as well as nutritionally beneficial. In order to do this, scientists began extracting genetic material from one species and implanting into another to produce a new organism. This became known as Genetic Engineering (GE) or

Genetically Modified Organisms (GMO). Biotech industries claim that these new GE crops are pest resistant and require fewer agrichemicals. According to Shiva, this is not true, evidence shows that rather than controlling weeds, pests, and diseases, genetic engineering increases chemical use and can create superweeds, superpest, and superviruses that are continually resistant to such chemical.⁵²

Today Up to 60 percent of processed foods in the U.S. contains some GE ingredients, and over 70 million acres have been planted with these crops.⁵³ These unlabeled GE foods and food ingredients include soybeans, soy oil, corn, potatoes, squash, canola oil, cottonseed oil, papaya, and tomatoes. In 1994 the first GE product to hit the stands was the Calgene Flavr Savr™ tomato, which was created by splicing artic flounder genes into tomatoes to prevent frost. The U.S. Food and Drug Administration (FDA) was aware that testing of the Flavr Savr tomato caused stomach lesions in laboratory rats, yet the product still hit the stands.⁵⁴ The Flavr Savr™ was pulled off the shelves shortly after due to the fact they did not travel well, not because they were potentially harmful to humans.

Public concern is that no one knows the long-term effects of these new genetic creations, or “frankenfoods” as referred to by many, and yet they are being fed to us without having to be tested or labeled. According to Joseph Mendelson III, legal director for the International Center for Technology Assessment and the Center for Food Safety, these GE foods are inherently unstable and each gene insertion creates the added possibility that formerly nontoxic elements in food could become toxic. He goes on to say that the FDA has been well aware of the “genetic instability” problem for more than a decade. In the early 1990s, FDA scientists warned that this problem could create dangerous toxins in food and was a significant health risk, but this did not influence the U.S. government from keeping these products from the public.⁵⁵ Virtually all other developed countries mandate labeling of biotech foods except the U.S. government who has refused to mandate safety testing or labeling for gene-altered produce.

GE crops and food have been met with much resistance around the world. People are concerned with the long-term effects of GE food on their health and the environment. The U.S. food industry is facing increasing resistance to their GE products. For example, the European Union has a ban on GE imports. With strong lobbying from Agribusiness, the U.S. has challenged the bans on GE foods through the avenue of the WTO, claiming that there is no evidence that GE foods are harmful. Although there has been research indicating the hazards GE foods, and much public protest against GE foods, big Agribusiness and Biochemical corporations are pushing forward to get GE crops everywhere.

United States

The affects of industrial agriculture and neoliberal policies in the U.S. have been extensive. For example, prior to the twentieth century, the U.S. was largely an agrarian society. As late as 1910, one-third of the population, roughly thirty-two million people lived on farms. By 1997 the number dropped to 1.92 million, so few that the U.S. Census Bureau stopped counting farmers (American Farmland, 1998:4).⁵⁶ Before this time most communities ate local food grown either in their own gardens or by local farmers. Today, most Americans get their food at the store with no knowledge of where the food was grown, by whom or by what methods. In the U.S. food travels an average of 2000 miles from the farm to the dinner plate. There is a huge disconnect between the food consumers eat and where it comes from.

Today, current food policies require food to be flown thousands of miles away from the communities who grow the food. Under the GATT regulations of the AOA, U.S. agricultural exports have risen 5 percent, but imports have also gone up 32 percent, including imports on crops that are grown in the U.S.⁵⁷ For example, it is not uncommon to live in the Corn Belt states of the U.S. (Iowa, Illinois, South Dakota, Nebraska, Indiana, western Kentucky and Ohio) and have to buy corn that came from Mexico, Canada or one of the other corn growing states. The majority of the corn grown in the U.S. is controlled by large agribusiness that ship the corn to one of their processing plants to be turned into starch, sweeteners and corn oil found in thousands of food products. These products, such as ketchup, soups, hotdogs and soda are packaged and then shipped around the world and back to the very communities that grew the corn. The U.S. is the largest corn producer and exporter, contributing to around 60 percent of the corn sold on the global market. Today the global market dictates to farmers what crops to grow. Most of the produce is limited to a few varieties of grain, soybeans and corn, which is then exported out of the U.S. and sold on the global market. Corn, wheat and grains are an important part of the American export program, which have forced U.S. farmers to abandon growing other food crops for these cash crops. The majority of the grains and corn grown in the U.S. are used for animal feed one-quarter is used for seed, food and processing.⁵⁸

Today all of these industrial practices of agriculture are being pushed onto the world as Global Food Policy. It's no longer about subsistence, but about monetary gain. Corporations have worked diligently to open the trade barriers to virtually every corner of the globe to reach every market. With The IMF and the WB enforcing indebted nations to shift from sustainable food practices to the mass production of monocultures for export, more and more people have found themselves hungry and homeless. According to James Ridgeway, "twenty-first century agriculture is built upon what is left of nineteenth-century mercantile foundations, where the European powers organized their colonies to

produce farm goods—not to feed the local population but to supply the needs of the mother country.”⁵⁹ Today, corporations represent the colonial empires of centuries past

The International Monetary Fund (IMF) and the World Bank (WB)

The Green Revolution, which promoted industrial agriculture, was first funded and enforced through the WB and the IMF as “development” projects and then as part of their “Structural Adjustment Programs” (SAPs). The idea was to shift developing countries from small family and subsistence farming towards large cash crop production for export. According to Debi Barker, deputy director at the International Forum on Globalization, the WB went about doing this by teaming up with governments and financial institutions, which in turn provided loans to huge corporations to distribute hybrid seeds, chemicals and the appropriate mechanized implementations to farmers in developing countries.⁶⁰

Beginning in the 1950’s the WB focused on shifting developing countries toward cash crop production with an initial focus on specialty crops such as cocoa, rubber and palm oil, which expanded to include “high-yield varieties” of wheat and rice throughout 1960’s and 70’s. The WB only gave out loans to those governments who supported the shift to industrial agriculture and would adhere to the structural adjustments mandated by the IMF. Starting in the 1980’s the World Bank shifted its interest to biotechnology and started funding corporations such as Monsanto, which had begun developing new transgenic crops. The WB created an agenda for biotechnology for the next decade and focused on facilitating the adoption of biotech methods in the “developing world.”⁶¹ Today the lines between the WB and the biotech industry are blurred, as they have an approved “staff exchange program.” That is, the WB trades employees with companies such as Dow, ARD, and Aventis.⁶²

It has been through the WB and the IMFs Structural Adjustment Programs, and the institutional ties to corporate interests that trade liberalization of agriculture has been introduced to the Third World. Countries seeking financial assistance from the WB and the IMF have had to shift from “food first” to “export first” policies as an agreement of receiving loans. Due to the obligation of indebted nations to the IMF and the WB, countries are forced to produce “cash crops” for export while allowing more imports in. According to Shiva, the Third World is being told to stop growing food for subsistence and instead to buy food on international markets, this process of globalization leads to a situation in which agricultural societies of the South become increasingly dependent on food imports, but do not have the money to pay for imported food.⁶³

Subsidies, Tariffs and Import Quotas

To understand the following policies, I must first address tariffs, import quotas and subsidies. All of these are economic measures put in place to protect local markets. Under today's neo-liberal policies all of these protectionist measures are seen as restricting trade and are the target for corporations and the WTO.

Tariffs and import quotas are protectionist measures put in place to protect local markets. Prior to current global policies most nations utilized one if not both of these measures. Tariffs are taxes placed on imported goods. Import quota's set a physical limit on the quantity of a good that can be imported into a country in a given period of time. Import quotas were utilized in the southern countries to protect themselves against northern subsidized commodities

Subsidies are a form of economic assistance paid by the government to keep prices below what they would be in a free market economy. There are various types of subsidies, but in this case, agricultural subsidies are a way of protecting local farmers. Agricultural subsidies are paid to farmers and agribusinesses to supplement their income, manage the supply of agricultural commodities, and influence the cost and supply of such commodities on international markets.⁶⁴ The U.S., the European Union (EU) and Japan are among the few developed nations giving farmers direct payments. According to Debi Barker, "most southern countries can't afford to make payments to farmers and the few subsidy programs in the South that exist do not come close to matching the amount of funds available in the North."⁶⁵ In 2002, President Bush signed into law a farm bill worth \$180 billion dollars in agricultural subsidies. According to Wole Akande a freelance journalist,

Behind the 2002 Farm Security and Rural Investment Act is a simple principle: U.S. producers will market crops at very low prices, and then have their incomes topped up by government transfers. For 2002-03, wheat and maize growers will get a 30 percent top-up, rising to almost 50 percent for rice and cotton farmers. The result will be that giant grain traders, such as the Cargill Corporation, will be able to buy commodities from farmers at artificially low prices and farmers will get fat government checks to make up for their losses⁶⁶

Such agricultural subsidies distort market prices around the world, which restrict access to markets in developed nations for poor farmers.

Uruguay Round: Agreement on Agriculture (AOA)

Previously at the GATT rounds, agriculture was an exception to the liberalization of trade rules, upon the insistence of the United States. In 1955, agricultural trade was excluded so to protect U.S. farm supply policies from import competition. In the mid-1980s the United States reversed its position, intending to deploy the GATT against agricultural protection.⁶⁷ At the end of the Uruguay Round, food was for the first time covered under GATT. The end of the negotiations covered all aspects of food and agriculture under the Agreement on Agriculture (AOA), and all members accepted the expanded rules over agricultural trade and policies.

Under the AOA there are three binding commitments: market access, domestic support, and export competition. According to Debi Barker, deputy director at the International Forum on Globalization,

The overall goal of the agreement is for countries to reduce or eliminated tariffs (i.e., import taxes), import quotas on commodities, or any other type of “barrier” that would prevent goods from entering a country. Another major aim is to reduce or eliminate subsidies, or direct payments, to farmers.⁶⁸

This set up works in favor of developed countries like the U.S., the European Union and Japan who already had established subsidies programs. Although these countries agreed to be put on a subsidy-reduction timeline, this has not eliminated subsidies for these countries. In fact, in the U.S. subsidies have doubled since the closure of the Uruguay Round. On the other hand, developing countries that did not have an established subsidy program were required to eliminate import quotas, reduce tariffs and forced to compete with goods from developed countries that are heavily subsidized. As a result, Southern markets are flooded with cheap goods undermining small, local farmers.

Uruguay Round: Trade Related Intellectual Property Rights (TRIPS)

Also included in the Uruguay Round of GATT was the negotiation on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Today under the WTO, TRIPS deals with copyrights, trademarks, industrial design and patents, including the protection of new varieties of plants. The TRIPS agreement requires all WTO members to adopt as their own domestic law, a system of intellectual property rights based on the U.S. model. According to Barker,

Such a global patent system sanctions biopiracy. For example, under WTO law, foreign corporations have the right to take traditional indigenous seed varieties that have been developed by small farmers over centuries, “improve” them by minor genetic alterations, and then patent them. These corporations then have the exclusive right to sell the patented seeds to the communities that once owned them in common and used them freely.⁶⁹

Under the TRIPS agreement corporations are able to claim property rights on seeds and plants that have been cultivated by farmers and peasants for centuries. For example, according to Shiva’s research, “Corporations like Rice Tec of the United States are claiming patents on Basmati rice. Soybeans, which evolved in East Asia, have been patented by Calgene, which is now owned by Monsanto. Calgene, also owns patents on mustard, a crop of Indian origin.”⁷⁰ The Neem tree, whose extracts contain natural pesticide, medicinal, and other valuable properties cultivated for centuries in India attracted the attention of various pharmaceutical companies, who started filing monopoly patents in 1990. After much resistance from activists, the patent was revoked and was seen as a victory against biopiracy. According to Shiva, “The seed, for the farmers, is not merely the source of future plants and food; it is the storage place of culture and history. Seed is the first link in the food chain. Seed is the ultimate symbol of food security.”⁷¹

The World Trade Organization (WTO)

As mentioned earlier the WTO is the successor to the General Trade Agreement on Tariffs and Trade (GATT), and as a successor, the WTO solidifies suggested policy into permanent enforced standards. The WTO also acts as a tribunal for disputes between member nations on the issues of trade. In the WTO system, any member can go to the dispute settlement body about other member's policies or laws that are seen as restricting the free flow of trade. The WTO allows countries to challenge each other's laws as violations of WTO rules. It has the power to sanction, to overrule state and local powers, and to override national regulatory powers. According the Corporate Europe Observatory, at the end of the millennium a number of high-profile trade disputes between the U.S. and the EU have taken place and the WTO dispute settlement body has overwhelmingly ruled in favor of corporate interests over those of people and the environment.⁷²

Dispute Settlements

- In early May 1997, a three-person WTO dispute settlement panel ruled that a nine-year ban imposed by the European Union (EU) on hormone-treated beef was illegal under WTO rule. The ruling overturned a consumer health law claiming that restrictions based on food health and safety be based on scientific evidence, and since the UN Food and Agriculture Organization (FAO) deemed the hormones to be safe, the WTO panel ruled against the EU's ban. This was seen as a victory for Monsanto, the US National Cattlemen's Association, the US Dairy Export Council, and the National Milk Producers Federation who lobbied vigorously for action.⁷³
- January 1999, The WTO ruled that the EU could no longer give preferential treatment to banana imports from former colonies in the Caribbean, "A decision, which is likely to hurt the regions already-impoverished, primarily small-scale banana farmers."⁷⁴ The complaint was filed by U.S. based banana giants: Chiquita, Dole and Del Monte, which control an estimated two-thirds of world banana exports
- February 2, 2006 the WTO ruled that the six-year European ban on genetically engineered crops violated international trade rules. According to the Washington Post, "This ruling was welcomed by pro-biotechnology groups in the United States, which had urged the Bush administration to file the case in 2003. Farm groups and biotech advocates are hoping the ruling will soften European resistance to the crops and, even more important to them, slow the spread of anti-biotech sentiment around the world."⁷⁵

North American Free Trade Agreement (NAFTA)

Prior to the Uruguay Round of GATT, U.S. trade officials were working diligently to create agreements with small groups of countries willing to bring down trade barriers. The U.S. first turned to Canada and Mexico to create the North American Free Trade Agreement (NAFTA), which went into effect January 1, 1994. NAFTA created a new framework for international trade, which included agriculture subsidies, banking, intellectual property rights, investment telecommunications, and services. NAFTA was the first of several attempts by the U.S. to create agreements with smaller countries of the South, such as the Free Trade Area of the Americas (FTAA) and the Dominican Republic Central American Free Trade Agreement (DR-CAFTA).

NAFTA went further than any other agreement to lift trade barriers between countries with extreme gaps in living standards. NAFTA took two developed countries, the United States and Canada, and one underdeveloped country, Mexico, and put them on the same playing field. NAFTA's agricultural agreement promotes the total liberalization of agriculture and forestry in Mexico, as well as liberalizing all agricultural and agrifood trade.⁷⁶ Supporters of NAFTA claimed that living standards in Mexico would rise as the result of increased exports and foreign investment and in the U.S. supporters claimed it would increase high-quality U.S. jobs, yet just the opposite has occurred in both countries. In Mexico workers did not receive a fair wage due to lack of labor rights, and global competition has contributed to widespread bankruptcy among local firms. In the U.S. millions lost their jobs due to companies moving their productions to Mexico and Canada. During the first seven years of NAFTA U.S. corn exports to Mexico doubled,⁷⁷ undermining Mexican corn production and culture. Mexican farmers could not compete with large-scale U.S. producers, which lead to the loss of 1.3 million agricultural jobs between 1993 and 2000.⁷⁸ Rural poverty rose from 54 percent in 1989 to 68 percent in 1998.⁷⁹ Poverty has driven millions to seek a better life in the U.S., causing the number of unauthorized Mexican immigrants into the U.S. to grow from an estimated 2 million in 1990 to 4.8 million in 2000.⁸⁰ U.S. spending on immigration controls skyrocketed in NAFTA's first eight years. Despite increased exports, U.S. growers have faced the lowest corn prices in a quarter century even with subsidies provided by the U.S. government. The main beneficiaries of these agreements were large agribusiness firms such as, Cargill and Archer Daniels Midland.

The Dominican Republic Central American Free Trade Agreement (DR-CAFTA) is also a bilateral agreement between the United States, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic. Like NAFTA, this agreement eliminates trade barriers between these countries. The U.S. congress passed DR-CAFTA DR-CAFTA August 2, 2005 and went into effect in each of the countries between 2006-2007. The U.S. sees this agreement as a stepping-stone to the creation of

the Free Trade Area of the Americas, which would encompass all of South America and the Caribbean as well of those of North and Central American nations except Cuba. DR-CAFTA is based on the same model as NAFTA and critics claim that it will benefit corporations while undermining millions of farmers, peasants and workers in these countries.

Transnational Corporations (TNC)

Who are behind all of these policies and agreements? Transnational Corporations. The Main beneficiaries of WTO agreements are TNCs; they have been at the center of all global policies including WTO agreements. Transnational Corporations have become major lobbyists in their effort to influence powerful WTO members, and have done the most extreme lobbying in the U.S. Thirteen major U.S. corporations including Bristol Myers Squibb, Dupont, Monsanto, and General Motors, came together to create the Intellectual Property Committee (IPC). The IPC worked successfully to get the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement on the GATT agenda.⁸¹ In addition to corporations lobbying for market access, corporate power players have also found themselves with positions in the U.S. government, working in favor of corporate interests.

Link between U.S. Government and Agribusiness

- **Daniel Amstutz** served as Under Secretary of Agriculture for Commodity Programs and International Trade between 1983-1987. from 1987-1989 he then served as Ambassador and Chief Negotiator for Agriculture during the Uruguay Round of the GATT talks. Prior to his work in the U.S. government he was President and C.E.O of Cargill Investor Services.⁸²
- **Ann Veneman** served as the U.S. Agricultural Secretary between 2001-2005. Prior to this position she served as the USDA's Foreign Agricultural Service (FAS) in 1986. Veneman rose to deputy undersecretary for international affairs and commodity, where she was a negotiator at the Uruguay round talks of GATT and was an early negotiator for NAFTA. In 1994 Veneman served on board of Directors for Calgene, which was later acquired by Monsanto, the first company to market Genetically Modified food. Between 1993-1994 she worked at an influential lobbying law firm, Patton, Boggs and Blow. One of her clients was Dole Co.⁸³
- **Allen Johnson** was appointed the Chief Agricultural Negotiator under the Office of the U.S. Trade Representative (USTR) from 2001-2005. Before joining the USTR, Johnson was President and Executive Vice President of the National Oilseed Processors Association, the CEO of the Iowa Soybean Association, and the CEO of the Iowa Soybean Promotion Board. Johnson was also a member Agriculture Advisory Trade Committee.⁸⁴
- **Richard T. Crowder**, the U.S. Trade Representative and Chief Agricultural Negotiator, was assigned his position in 2005 by President Bush. Prior to Joining the USTR Crowder was president and CEO of the American Seed Trade Association, Senior Vice President, International, of DEKALB genetics Corporation (now part of Monsanto).⁸⁵

Agribusiness

TNCs have seized the agriculture sector, from the seed producers to the grocers, and food continues to travel further and further distances to reach the dinner table. Until the 1986-94 Uruguay Round of GATT, agriculture was seen as a domestic matter, and was excluded from global trade policy. TNCs used their monetary power, their U.S. governmental connections and extensive lobbying skills to shape current global trade policies to include agriculture. The liberalization of agriculture has taken one of our most primal needs and handed it over to corporations. Today agro-business is one of the most extreme examples of corporate concentrations. According to the Institute for Food and Development Policy

Most of the commodities that provide export income for developing countries; bananas, cocoa, palm oil, coffee, and so forth, are controlled by a handful of corporations based in the United States and Europe. The corporations produce the crops themselves, contract with local estate owners for the production, or buy it through marketing boards controlled by the domestic elite. They then market the commodity. The lion's share of the return goes to the foreign corporation, not to the domestic economy.⁸⁶

Corporate mergers have placed our world's food systems into the hands of a few transnational corporations. As corporations join teams instead of competing, fewer corporations control each stage of food production, giving farmers and consumers fewer choices. According to Shiva Vandana,

Ten corporations control 32 percent of the commercial-seed market, valued at \$23 billion, and 100 percent of the market for genetically engineered, or transgenic, seeds. These corporations also control the global agrochemical and pesticide market. Just five corporations control the global trade in grain. In 1998, Cargill, the largest of these five companies, bought Continental, the second largest, making it the single biggest factor in grain trade.⁸⁷

ConAgra, a company in food production, is one of the top three sellers of retail food products in the world. Although many are unfamiliar with its name, many are familiar with its popular brand names: Armour, Butterball, Chef Boyardee, Healthy Choice, La Choy, Orville Reddenbacher, Parkay and Hebrew National, to name just a few.⁸⁸ It is corporations such as these that are actively involved in shaping international food policy, which is enforced by the WTO.

Corporate Claims to World Hunger

The Argument used by TNCs in an effort to bring down trade barriers, is world hunger. Agribusiness lobbyist claim that increased mechanization of agriculture, synthetic fertilizers, chemical pesticides and GMO's, provide the only hope of feeding the growing population. They argue that industrial agriculture is the only answer for the more than 800 million people who go hungry each day.⁸⁹ They claim that that people are starving because there is not enough food to feed the current population, much less the future populations. Written across the top of an old Monsanto's webpage was the headline, "Guess Who's Coming to Dinner? 10 billion by 2030" Their market strategy is a campaign to end world hunger.

These corporations claim that it is a shortage of food causing world hunger, but as shown by the Institute for Food and Development Policy, it is abundance, not scarcity that best describes the world's food supply. Every year, enough wheat, rice, and other grains are produced to provide every human with 3,500, daily calories. In fact, enough food is grown worldwide to provide 4.3 pounds of food per person per day.⁹⁰ A study conducted by the World Bank in 1986 concluded that it is not a matter of needing more food, but access to food. The WB stated that it was a matter of "redistributing purchasing power and resources toward those who are undernourished."⁹¹ Contrary to corporate propaganda, it has been shown that most hungry countries have enough food for all their people. In fact, 78 percent of all malnourished children under five live in countries with food surpluses, surpluses that are exported.⁹²

Despite what these studies have indicated, corporations such as, Monsanto, Novartis, AgrEvo, DuPont want you to believe they will save the world from hunger with more of their chemical intensive and genetically modified crops. Cargill's Vice Chairman David W. Raisbeck, in a press release stated that "ending world hunger and reducing poverty requires that current high levels of agricultural protection come down. Subsidized competition and trade-distorting domestic supports in developed countries must be curbed and market access barriers must be brought down everywhere."⁹³ Cargill is the largest private company, the eleventh largest company in the world and has over fifty separate businesses, ranging from grains, beef packing to fertilizers, peanuts, salt, coffee, transportation, steel, rubber, fruits and vegetables.⁹⁴ Cargill stands to gain extensivley from a free trade regime and ending world hunger is just one way to market their product.

Conclusion

The globalization of agriculture not only affects those in the Third World, it affects all of us. What we buy in the store affects not only farmers in the Third World, but it also affects our local farmers. The majority of the food that is grown in the U.S. is sold on the global market for profit. Food is shipped an average of 2,000 miles from farm to dinner plate, which could only be possible with genetic mutations. Today, global food policies undermine local food security by transforming the farm into a factory.

Monocultures, chemicals and mechanizations deplete our soil, deteriorate our ecosystems, poison our bodies and erase cultural heritage. Corporations have been at the forefront of liberalizing agriculture, lobbying vigorously for the eradication of trade barriers, and the forced adoption of industrial agriculture. The international institutions that govern global trade, the World Bank, the International Monetary Fund and the World Trade Organization have supported these corporations by passing policies which promote sales, and sustain a model of chemically intensive agriculture. We are all affected by these policies and millions of people around the world are not standing by idly while these corporations try to steal our food. People around the world are rising up in protest against corporate rule over our food systems.

Social Resistance

I think what really unites us is a fundamental commitment to humanism because the antithesis of this is individualism and materialism. The common problems of land, production, technology, markets, ideological formation, training, poverty—all of these we have in common. But what also unites us are great aspirations. We are all convinced that the current structures of economic, political, and social power are unjust and exclusionary. What unites us is a spirit of transformation and struggle to change these structures all over the world. We aspire to a better world, a more just world, a more humane world, a world where real equality and social justice exist. These aspirations and solidarity in rural struggles keep us united in the Vía Campesina.

Rafael Alegria, Former Operational Secretariat of the Vía Campesina

Corporate driven globalization is a formidable force to reckon with, but this has not stopped the millions of farmers, environmentalists, students, activists, workers and women from taking to the streets demanding change. On every continent there are social movements rising from the ground up, in resistance to corporate driven globalization. This resistance comes in all different forms across the globe, but all unify in the injustices of neo-liberal policies. The following movements are just a few examples of some of the movements that are rising up against neo-liberalism, global food policy and the industrialization of agriculture: La Vía Campesina, Brazils Rural Landless Workers Movement (MST), Navdanya, Slow Food, and Community Supported Agriculture. Although these movements are rooted in diverse political atmospheres with diverse political histories, these movements are all in opposition to the globalization of agriculture. The following highlights the work that each of these movements is doing within in their communities, their countries, and for our world.

La Vía Campesina

Vía Campesina is based in eight regions of the world and is the largest international peasant movement to date. In 1993 La Vía Campesina was officially constituted as a world organization in Mons, Belgium. Vía Campesina is made up of 149 organizations from 56 countries and their memberships consist of peasants, farmers, the landless, women, indigenous people, rural youth and agricultural workers. “Vía Campesina is a transnational peasant and farm movement vowed to collectively resist the globalization of agriculture to ensure that the voices of those who produce the world’s food will be heard.”⁹⁵

The main goal of Vía Campesina is to build a peasant-based alternative model of agriculture through agrarian reform, food sovereignty, biodiversity, genetic resources, gender relations, sustainable agriculture, migration and migrant farm workers' rights, and human rights.⁹⁶ Vía Campesina strongly believes and promotes food sovereignty, which they have defined as:

the right of peoples to define their own food and agriculture policies; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self reliant; to restrict the dumping of products in their markets. Food sovereignty does not negate trade, but rather, it promotes the formulation of trade policies and practices that serve the rights of peoples to safe, healthy and ecologically sustainable production.⁹⁷

Via Campesina goes about creating change by unifying local organizations with each other to allow exchanges of information, experiences and strategies, as well as supporting and strengthening local struggles in pursuit of access to land rights.

Vía Campesina holds a strong political position against neo-liberalism and the globalization of agriculture. They continuously challenge multinational corporations and neo-liberal policies enforced through the World Bank, the International Monetary Fund and the World Trade Organization. Via Campesina demonstrates their opposition through demonstrations, protests and other forms of mobilization all around the world; they walk the streets of Paris, Geneva, Seattle, Rome, and Cancun in collective resistance to the current global policy on agriculture. According to Annette Aurélie Desmarais, Assistant Professor of Justice Studies at the University of Regina, Canada, “Vía Campesina is succeeding in globalizing local struggles while at the same time localizing global struggles.”⁹⁸

Movimento dos Trabalhadores Rurais Sem Terra (MST): Brazil's Landless Workers Movement

Brazil's Landless Workers Movement (MST) is the largest social movement in Latin America, with an estimated 1.5 million landless members organized in 23 out of 27 states. The MST was officially founded 1984 as a national organization. The goal of the MST is to carry out land reform by occupying unused land forcing the Brazilian government to redistribute millions of acres of agricultural land to thousands of landless families. Land occupations are rooted in the Brazilian Constitution, which says that land that remains unproductive should be used for a “larger social function.” The MST has won land titles for more than 350,000 families in 2,000 settlements as a result of MST

actions. Once land occupations have occurred, the MST establish cooperative farms, construct houses, schools and clinics for children and adults, and promote indigenous cultures, a healthy and sustainable environment, and gender equality.⁹⁹

The MST stands in strong opposition to the neo-liberal model of export agriculture, and is united with La Vía Campesina on agrarian reform. In order to be heard and challenge the Brazilian government, MST members have confronted police, the military, hired gunmen, imprisonment, beatings, and death.¹⁰⁰ According to the MST's webpage, "The MST's success lies in its ability to organize and educate. Members have not only managed to secure land, therefore food security for their families, but also continue to develop a sustainable socio-economic model that offers a concrete alternative to today's globalization that puts profits before people and humanity."¹⁰¹

Navdanya

Navdanya was founded in India by world-renowned scientist and environmentalist Dr. Vandana Shiva. Navdanya started in 1982 as a program of the Research Foundation for Science, Technology and Ecology (RFSTE) and by 1984 had shifted as an organization to protect biodiversity, defend farmers' rights and promote organic farming. This transition came in response to corporations wanting to patent seeds, crops and life forms that have been cultivated for centuries by subsistence farmers.

Navdanya has a membership of over 70,000 farmer families in thirteen states of India, who are dedicated to preserving biodiversity, saving and sharing seeds and practicing chemical-free agriculture. They have established 40 community seed banks across India, organized more than 25 international courses on topics such as Biodiversity to Globalization, Navdanya trains and supports farmers who have converted to, or who are already practicing organic farming. Navdanya also has its own organic farm and seed bank located in Uttranchal, Northern India. As stated on its webpage "Navdanya is actively involved in the rejuvenation of indigenous knowledge and culture. It has created awareness on the hazards of genetic engineering, defended people's knowledge from biopiracy and food rights in the face of globalization."¹⁰²

Navdanya's vision is for seed sovereignty, food sovereignty, water sovereignty, land sovereignty and to protect nature and people's rights to knowledge, culture and biodiversity through "Earth Democracy". They are committed to keeping seed and agriculture free of corporate control and resist patents on seeds and life forms.¹⁰³

Principles of Earth Democracy

- All species, peoples and cultures have intrinsic worth
- The earth community is a democracy of all life
- Diversity in nature and culture must be defended
- All beings have a natural right to sustenance
- Earth Democracy is based on living economies and economic democracy
- Living economies are built on local economies
- Earth Democracy is a living democracy
- Earth Democracy is based on living cultures
- Living cultures are life nourishing
- Earth Democracy globalizes peace, care and compassion¹⁰⁴

Slow Food

The Slow Food movement started in 1989 in response to the establishment of a McDonald's restaurant in the famous Piazza di Spagna in Rome. The founder Carlo Petrini, a food journalist, became concerned about what fast food would do to the local food culture. Slow Food is a non-profit organization committed to counteracting the disappearance of local food traditions and challenging the fast food culture. Slow food is not a politically charged organization, but rather they take a passive stance, attracting Slow Food philosophy through education and taste.¹⁰⁵

Slow food is founded on the concept of eco-gastronomy, recognition of the strong connections between plate and planet, and promotes the concept of "Good, Clean, Fair food". According to their web page, "We believe that food we eat should taste good; that it should be produced in a clean way that does not harm the environment, animal welfare or our health; and the food producers should receive fair compensation for their work."¹⁰⁶ Slow Food is dedicated to protecting traditional grains, vegetables, fruits and animal breeds that are disappearing due to the fast food and industrial agriculture. Slow Food supports a living wage for farmers and has most recently incorporated food sovereignty into their agenda. According to Petrini, "The principles of small-farming agriculture and food sovereignty can help rebuild the fabric of productive rural communities based on strong human relationships. They can create a new small-scale agriculture economy that respects the environment and provides small farmers and their families with dignity and skills."¹⁰⁷ Slow food is dedicated to preserving local food traditions, which are produced by local farmers.

Community Supported Agriculture (CSA)

Community Supported Agriculture (CSA) is just one of many movements that are in opposition to the policies that have arisen under globalization. CSA is a growing movement of farmers and community members who have come together in support of one another. The CSA movement comes in response to current agriculture policies and practices and offers an alternative by providing healthy food for local people through a sustainable practice.

In 1986, the Community Supported Agriculture (CSA) Movement began in the United States at two farms simultaneously, Indian Line Farm in Massachusetts and Temple-Wilton Community Farm in New Hampshire. These two farms borrowed their practices from farmers in Switzerland and Germany who had asked their customers to pay a portion of the farm's annual production costs in exchange for a weekly share of produce. These two farms began educating farmers and consumers in the surrounding area about this revolutionary idea and it began to spread across the U.S. Today, the U.S. is home to at least 1,700 CSA farms.

Community Supported Agriculture is a relationship of mutual support and commitment between local farmers and community members who pay the farmer an annual membership fee to cover the cost of the farm. In return, members receive a weekly share of the farms bounty throughout the growing season, as well as reconnecting to the land and directly participating in food production. Members also share in the inherent risks of farming, including poor harvest due to bad weather and pests, but also share in the potential bounty (DeMuth, 1993).¹⁰⁸ Consumers benefit from a CSA arrangement by receiving a wide variety of foods harvested at their peak of freshness, ripeness, and by learning about new and seasonal foods and sustainable agriculture. Growers benefit from a secure annual income and market for their crops, and both parties benefit from having a more personal connection with each other.

CSA supports a sustainable agriculture system. It cuts out the middlemen by connecting the producer with the consumer, grows a diversity of produce, strengthens local economies and creates a community around the farm. Most CSA farms believe in these core concepts, yet each of these farms is unique. They come in all different sizes and scales and are as diverse as the communities and people who established them. No one farm is the same, which encompasses the spirit of CSA.

This movement comes in response to the current food policies which require food to be flown thousands of miles away from the communities who grew the food. CSA offers an alternative to this industrial model by growing local food for local people at a fair price to them and a fair wage to the grower, and grown in a manner that is sustainable for the land.¹⁰⁹

Conclusion

Today globalization is no longer a topic being discussed behind closed doors. Globalization has become a conversation that is being discussed in our communities, our classrooms and at the dinner table. In response to neo-liberal policies, citizens around the world have come together in resistance. Working families, students, farmers, environmentalists and activists, have taken to the streets in protest, establishing alternatives within their communities and igniting dialogue around the world. Peter Rosset of the Institute for Food and Development Policy states, “As corporate-driven economic globalization and runaway free trade policies devastate rural communities around the world, farmers’ organizations are coming together around the rallying cry of food sovereignty.”¹¹⁰

Agriculture is just one aspect of the globalization, yet food is one of our most basic needs, which has become a commodity for sale. When agriculture was liberalized it did not just affect the food that we receive on the global market, it also affects communities, families, farmers and individuals. Global food policies have stripped away land and access from rural peoples around the world, while filling the pockets of large corporations. Globalization of agriculture affects how we as a people get our food, the types of food we eat, and the environment in which we live. La Via Campesina, Brazils Rural Landless Workers, Navdanya, Slow Food and Community Supported Agriculture, are just of few of the well known movements found around the world that have created alternatives to current agricultural policy. Each of these movements is rooted in their own historical and political environment, but all unify against a neo-liberal global agenda and an industrial practice of agriculture. These movements have created alternatives to what is being offered by neo-liberal policy, which puts a price tag on anything and everything.

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