UNIDAD ACADÉMICA B ESTUDIOS DESARROLLO

Surviving Modern Agriculture in Nebraska: Organizational Strength and Sustainability

THESIS PRESENTED BY

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FOR THE DEGREE OF DOCTOR IN DEVELOPMENT STUDIES

Autonomous University of Zacatecas Zacatecas, Zacatecas, Mexico 29 August 2012

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Richter-Tate, Caleb

Surviving Modern Agriculture in Nebraska: Organizational Strength and Sustainability. Caleb Richter-Tate. Zacatecas, Zacatecas, México, 2012.

Director: Dr. Gerardo Otero Codirector: Dr. Christina Dando

Doctorate Thesis, Autonomous University of Zacatecas, Development Studies (Universidad Autónoma de Zacatecas, Unidad de Estudios del Desarrollo).

1. Alternative Agriculture	2. Sustainable Development
3. Political-Cultural Formation	4. Grassroots Participation

I. Dr. Gerardo Otero II. Autonomous University of Zacatecas, Development Studies (Universidad Autónoma de Zacatecas, Unidad de Estudios del Desarrollo) III. Surviving Modern Agriculture in Nebraska: Organizational Strength and Sustainability

DEDICATION

In memory of Dr. Charles "Chuck" Gildersleeve

ACKNOWLEDGEMENTS

There are many institutions I want to recognize for their part in helping me finish this thesis and complete my Ph.D. First, I would like to thankfully acknowledge CONACYT for the funding that made both my research and my schooling possible. I would like to recognize the Autonomous University of Zacatecas and the School of Development Studies for providing the academic training and instruction needed to undertake this research project and for the opportunity to participate in the Development Studies doctoral program. I would also like to recognize the University of Nebraska-Omaha and the Department of Geography/Geology for their academic support and for providing me with a space to work on my research. Without the help and support of these institutions and their respective staffs and faculties, the completion of this research would not have been a reality. Additionally, I would like to thank Dr. Andrew Swift from the University of Nebraska-Omaha for his help with the statistical and mathematical aspects of this thesis, and I want to thank and recognize the members of my thesis committee for their support, patience, and understanding throughout this research process. Thank-you for the guidance and direction you all provided.

Next, I would like to thank the organizations and all of the individuals who contributed to my study and participated in this research. I want to thank the Center for Rural Affairs, the Nebraska Sustainable Agriculture Society, the Nebraska Farmers Union, and BOLD Nebraska for providing the main content and for the chance to investigate their organizations. I want to thank the members and supporters of these organizations with whom I spoke and interviewed throughout the duration of my field work. I appreciated the open-invitation I received and all of the conversations and discussions that were had throughout the process. I especially want to thank Dennis Demmel for his extensive knowledge on alternative agriculture and on the organizations involved in alternative agriculture in Nebraska. He opened the door to these organizations by introducing me to people involved in the leadership of these groups. I want to thank William Powers and Krista Dittman of the Nebraska Sustainable Agriculture Society, Jim Knopik of the Center for Rural Affairs, and Graham Christensen of the Nebraska Farmers Union for inviting me to attend organization sponsored events and workshops and for allowing me access to their respective organizations. Thanks to all of the people who were interviewed and took time to participate. Without these individuals' and organizations' openness and willingness, none of the field work would have been possible.

Finally, I want to recognize, acknowledge, and thank all of my family and close friends who have been there for me throughout this endeavor. I especially want to recognize and thank Diana Tate, Robert Richter, and Sarah Richter-Korpan for always being there for me; Maria Arbelaez and Don Larimer for being my parents away from home; Ashley Chase for putting up with me and my stress over the last year and a half; and Sophia (Sofi) Garcia for being a discussion partner during my field work.

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ABSTRACT

Surviving Modern Agriculture in Nebraska: Organizational Strength and Sustainability

Capitalist development in agriculture has caused many social and ecological issues for rural communities and for small- and mid-sized producers in the United States. Rural communities and agriculture-based organizations have responded to the challenges of modern agriculture in distinct ways and with unique approaches. This thesis investigates the role that civil society has played in contesting and transforming the modern agricultural paradigm and highlights the need for political participation by local, grassroots organizations to influence and change current development trends towards a model that is more socially and ecologically sustainable. A neo-Gramscian perspective has been used to analyze grassroots organizations working for change in Nebraska. This research focuses on current alternative approaches to agricultural production in Nebraska and on two grassroots organizations in the state (Center for Rural Affairs and Nebraska Sustainable Agriculture Society) that are contesting, confronting, and attempting to transform the modern agricultural paradigm.

Key Words: Alternative Agriculture, Agrarian Social Structure, Sustainable Development, Grassroots Participation, Political-Cultural Formation, Organized Resistance, Empowerment

RESUMEN

Sobreviviendo Agrícola Moderna en Nebraska: Sostenible y la Fuerza Originalizar

El desarrollo capitalista de la agricultura ha causado muchos problemas sociales y ecológicos en las comunidades rurales y los productores de pequeñas y medianas empresas en los Estados Unidos. Las comunidades rurales y las organizaciones basadas en la agricultura han respondido a los desafíos de la agricultura moderna en formas distintas y con enfoques únicos. En esta tesis se investigará el papel que tiene la sociedad civil en el cuestionamiento y la transformación del paradigma de la agricultura moderna, y se pondrán de relieve la necesidad de la participación política de las organizaciones de base locales, para influir y cambiar las tendencias actuales de desarrollo hacia un modelo más social y ecológicamente sostenible. Una perspectiva neo-Gramsciano se aplica al análisis de las organizaciones de base que trabajan para el cambio en Nebraska. Esta investigación se centra en los enfoques alternativos de la producción agrícola actual en Nebraska y en dos organizaciones de base contra-hegemónicos en el estado que están disputando, enfrentándose, y tratando de transformar el paradigma de la agricultura moderna.

Palabras Claves: Agricultura Alternativa, Estructura Social Agraria, El Desarrollo Sostenible, La Formación Político-Cultural, La Resistencia Organizada, Empoderamiento

Chapter I

SURVIVING MODERN AGRICULTURE IN NEBRASKA

The U.S. Supreme Court declined to review a lower court's ruling in 2007 that Initiative 300 (I-300) was unconstitutional and violated the commerce clause of the U.S. Constitution. In doing so, the U.S. Supreme Court effectively overturned a 25 year-old law in Nebraska that prohibited non-family farm corporations from owning farmland or livestock in the state. Initiative 300 allowed unrelated farmers and ranchers to own up to 49 percent of an agricultural entity in Nebraska before that arrangement was no longer considered a 'family farm.' The Initiative was originally designed for the easy transition of beginning farmers and ranchers into production agriculture and to protect the state's family farms and agribusinesses from being taken over by large, out-of-state corporations (Mabin, 2007; Center for Rural Affairs [CFRA], 2011b). Initiative 300 helped restrict corporate interests that had no connection to the land or communities affected by rural agricultural practices of Nebraska, and it allowed producers to have more control and freedom over what they produced and how they produced it.

The partial success of I-300 is apparent by looking at Nebraska's beef-producing industry. Between 1982 and 2005, Nebraska remained one of the nation's top beef-producing states while retaining the most independent producers of beef in the nation. Over the same period in other states, increases in beef production came with a loss in the overall number of independent producers (Heffernan, 2007). Initiative 300 also slowed irrigation development in the Sandhills and helped keep large-scale, corporate hog operations out of the state (Aiken, 2007). Initiative 300 was challenged in federal court by six plaintiffs who argued that the law put agribusiness in Nebraska at a competitive disadvantage with those in other states. In 2008, organizations against market reforms, like the Nebraska Farm Bureau and the Nebraska Cattlemen, opposed new legislation similar to I-300 and helped defeat a Nebraska state corporate farming ban (CFRA, 2012; Meyer, 2012). This victory in court demonstrates the power, influence, and strength of big business, corporate interests or, in other words, the capitalist class in agriculture. These interests are becoming stronger and more influential than the state and stronger than the voting public in the state. The defeat of I-300 is an example of removing

protections for small- and mid-sized producers and of deeper integration into the U.S. modern agriculture paradigm, and of a legal shift in the Federal Courts to a harder line on state regulations that impact or interfere with interstate commerce and investments. This defeat signals the predominance of the modern agricultural paradigm in the United States and reinforces the legitimacy of using this type of production even when it goes against the will of the voting majority. The defeat of I-300 is also an example of how the capitalist class is able to exercise power and enhance its control of production through the state apparatus, and it may have set the legal conditions for the final demise of farmers as a subordinate class, despite the resilience they have shown throughout previous decades.

The 'Golden Age' of U.S. agriculture (1900-1920) was the most prosperous time that U.S. farmers had ever experienced; however, since that period rural populations have been declining steadily and fewer producers have remained on the farm (Cochrane, 1979; Gardner, 2002; Hurt, 2002a; 2002b). This depopulation has had devastating effects, both directly and indirectly, on rural communities and their inhabitants. Agriculture played an important role in the development and establishment of the United States: at the beginning of the nineteenth century, 90 percent of families in North America farmed. Even though the percentage of families farming had dropped to below two percent by the early twenty-first century (Wittman, 2010: 810), ruraland agriculturally-based communities and families significantly contribute to the U.S. economy. Despite the exodus from the U.S. countryside since the 1800's, many rural communities remain and are an important part of U.S. culture and tradition (Slama, 2004: 9-11). The communities, families, and individuals that do remain should have the right to preserve and maintain their culture and way of life equal to any other cultural group in the United States or abroad. Not only do these people have the right to exist, but they also have the right to build and develop their cultures as well (Desmarais, 2007: 72-73) Some rural families have lived on the same plot and farmed the same ground for more than six generations, and their existence and lifestyles are being threatened. To lose all of these rural communities would be an unfortunate tragedy and the loss of an important part of U.S. culture and heritage. Although rural populations have been declining since the 1800's, changes in U.S. agricultural policy since the 1980's and the neoliberal restructuring of the agricultural sector have only sharpened and accentuated the previously polarizing trends. Founded on the ideology of neoliberal globalism, these new

policies and practices have had a devastating impact on many rural- and agriculturally-based communities in the United States.

In addition to the loss of culture, the modern agricultural production model has ecological and social implications. Hunger, food shortages, and the food crisis are all connected to modern agricultural production, and labor sovereignty, immigration, and public health are also affected by current agricultural practices. The entire food production model has changed and developed with modern agriculture. Market exclusion developed along with the consolidation of power among only a few corporations in the agricultural inputs and the processing and distribution sectors, which has made it hard for smaller farm operations to compete. The ecological degradation caused by modern agricultural production has been linked to global warming and to an increase in the amount of greenhouse gasses in the atmosphere (Lappe, Collins, Rosset, & Esparza, 1998). Soil nutrient depletion, water contamination, and ocean dead zones are all results of current agricultural practices, and the increased use and production of genetically modified (GE or GMO) seeds and plants has led to the loss of plant species. All of these factors, along with rural and community development issues, are affected by agricultural policy and practices, and modern agricultural production has consequences that are felt globally.

Starting in the 1980's, the U.S. agriculture production model began to deepen the domination of large capitalist interests, and now that model consists of neoliberal agricultural practices and policies based on the ideology of the free market and on the alliances between major capitalist farmers and ranchers and the agribusiness multinational corporations that control international commodity trade, seed trade, and pesticide production. The neoliberal agricultural model gives priority to large holdings that concentrate on monocultures of commodity crops for export. This type of production involves using large amounts of agrochemicals, herbicides, and pesticides, which promotes labor efficiency. Large producers are able to drive workers and small producers off the countryside and, in turn, exploit the few people who remain in order to achieve the highest profit margin (Storey, 2001: 194-195; Pritchard, 2005b: 5).

After examining the social and ecological effects of the modern agricultural paradigm, the legitimacy, rationale, and sustainability of this paradigm come into serious question. Proponents of neoliberalism and the modern agricultural paradigm point to the positive aspects of this type of production, such as increased productivity, commodity specialization, expanded markets, and the increase in foreign trade that has occurred since the 1980's (Dimitri, Effland, & Conklin, 2005: 2, 7-9). Neoliberalism draws from neoclassic economic theory which assumes that the present farming system is socially desirable, that individual behavior is guided by rational-choice decision-making, and that the market will dictate decisions on how and what to produce and on whether or not to continue farming (Labao & Meyer, 2001: 110). In general, neoliberalism and neoliberal-guided policies and practices are not concerned with social costs, income-distribution issues, or ecological degradation because, according to this ideology, the self-correcting market mechanisms will ultimately address and correct the issues (Pritchard, 2005a: 5). However, the destructive social and ecological tendencies that accompany the neoliberal model, such as land consolidation, forced migration, and food insecurity, as well as the lack of attention and support that those issues receive, are exactly why the current agricultural production model has come into question. The loss of family farms and rural depopulation continues to occur as small operations are continually taken over by large and corporate farming operations, leading to even more social and community-dislocation issues (Page, 1996).

The question then becomes: Have big business, corporate interests, and the capitalist class become too powerful to contest, or are there still ways to confront, challenge, and effectively change the modern agricultural paradigm so that power is recovered by individuals, small- and mid-sized producers, and the voting public? Rural communities and agriculturally-based organizations have responded to the challenges of modern agriculture in a variety of ways and on different levels of geographic organization. With varying degrees of success, local, state, and regional organizations have used different approaches to respond to the ecological and social problems associated with the modern agricultural paradigm. The success of these communities and organizations often depends on organizational strength, community solidarity, leadership types, and the level of awareness possessed by individuals in those rural communities. By raising people's awareness and increasing organizational strength, it is possible to contest, confront, challenge, and change the modern agricultural paradigm (John, 1993; Castle, 1998).

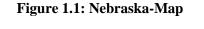
This thesis will investigate the role that civil society has in contesting and transforming the modern agricultural paradigm into a model that is more socially desirable and ecologically sustainable. Initially, this research gives a historical account of U.S. agriculture, identifies the modern agricultural paradigm, explains its social and ecological consequences, and highlights the class-structural process involved as it relates to direct agricultural producers. Next, this thesis explores what alternative agriculture is and how alternative and sustainable agricultural practices contest the negative impacts of the modern agricultural paradigm. Finally, this thesis examines rural- and agriculturally-based grassroots organizations demonstrating how these organizations are using alternatives in agriculture to contest agricultural hegemony and identifies the organizational aspects and internal dynamics of these organizations. More specifically, this research examines grassroots organizations in Nebraska and 'bottom-up' organizational approaches to contesting the modern agricultural paradigm and evaluates how successful these organizations have been in helping small- and mid-sized producers and the rural communities they inhabit to 'survive modern agriculture.' In order to show the effects of modern agricultural production in Nebraska, two rural- and agriculturally-based grassroots organizations located there have been chosen as the subjects of this research.

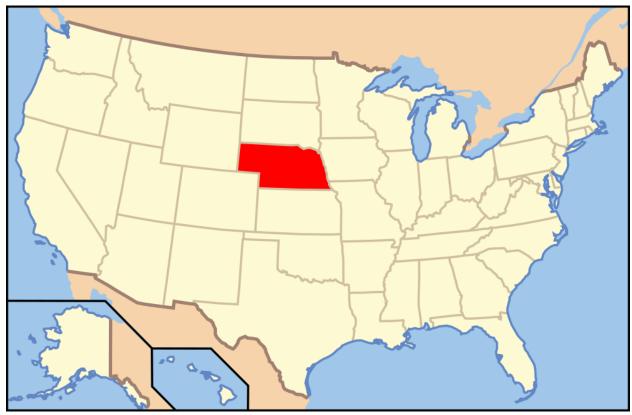
This research is not designed to create or suggest a new agricultural model, nor does it offer ideas on innovative agricultural practices. Instead, it seeks to demonstrate how grassroots organizations are able to influence and change current development trends in agriculture towards what they conceive as an agricultural model that is more socially desirable and ecologically sustainable. It will also focus on the strength of rural organizations, the possibilities for peaceful and self-determined social change, and how change can be accomplished through grassroots participation, consolidation of organizations, strategic alliances, and political action.

Justification and Significance

This research is relevant to the field of Development Studies in two ways: first, U.S. agriculture has had a huge role in world trade and development; second, it examines the possibility of progressive change in the United States, the core of the world economy. Agricultural development has been an important part of U.S. economic development, and despite the long history of international and global trade, the role of agriculture is becoming more significant in the neoliberal era of globalized capitalism. Currently, the United States is one of the largest producers and exporters of agricultural products and U.S. agricultural development is

closely linked to the future of world agricultural development as its model has been transferred to most irrigated areas of the world (Antle, 1988; Food and Agriculture Organization of the United Nations [FAOSTAT], 2008). Because of the role the United States plays in the global agricultural system, examining ways to contest U.S. agricultural hegemony at the source is important in providing methods of resistance that may prove effective and applicable in other settings, both domestic and foreign.





Source: (theclipartwizard.com, 2010)

Situated on the Great Plains in the middle of the United States, Nebraska is primarily an agriculturally-driven state. Nebraska is a top producer of many commodities and it ranks in the top ten nationally in the production of beef, corn, beans, millet, sorghum, soybeans, wheat, hogs, and alfalfa (United States Department of Agriculture [USDA], 2010). In many ways Nebraska represents, and is mirrored by, other Midwestern states, especially those where the majority of

economic activity is related to agricultural production, such as Kansas, Iowa, or the Dakotas. Nebraska agricultural production epitomizes the modern agricultural paradigm, and it is an ideal setting to illustrate the social and ecological effects of modern agriculture and to examine the alternative approaches to the current production model. The way grassroots organizations in Nebraska respond to the effects that accompany modern agriculture, how these organizations challenge, confront, and contest the modern agricultural paradigm, and the effectiveness of these organizations in transforming that paradigm will be explored and developed within the context of this state. Politically, Nebraska is a conservative Republican stronghold where neoliberal policy and practice and the interests of big business are well represented. Nebraska has strong ties to many large corporations that are involved in agribusinesses, food production, food processing, and commodity transportation and is home to ConAgra Foods, ConAgra Cattle Feeding, Tyson Foods, Cargill Corn Milling, Kraft Foods, Union Pacific Corporation, and Berkshire Hathaway which has holdings in Tyson, Coca-Cola, Anheuser-Busch, and Proctor and Gamble. Nebraska is made up of many rural communities and a few urban centers, and agricultural production affects virtually every individual and community in the state.

Agricultural production in Nebraska accounts for a large amount of total U.S. agricultural production, and state agricultural exports have consistently ranked in the top five nationally since 1997 (USDA, 2011). Ninety-eight percent of cash receipts collected in the state in 2009 came from the top ten agricultural commodities; agricultural-related economic activity contributed more than \$15 billion dollars to the state economy, and agricultural production represented five percent of the total U.S. economy (USDA, 2012b). Over \$4.8 billion dollars were earned by Nebraska agricultural exports in 2007, with every dollar spent on those exports generating an additional one dollar and 36 cents of economic activity in the state. In the same year, over 20 percent of Nebraskans were employed in the agricultural sector, property taxes from agricultural activity contributed over \$700 million dollars to the state, and U.S. Federal Government payments to Nebraska farmers totaled over \$387 million dollars. Nebraska farmers spend around \$14 billion dollars yearly on agricultural production expenses (USDA, 2010) and production capabilities of the ethanol industry in the state continue to expand, and in 2010 Nebraska was the number-two ranked producer of ethanol in the United States with over two billion gallons produced (USDA, 2012c).

Nebraska agriculture contributes significantly to both the state and the national economies, its agricultural exports play an important role in world trade, and the social and ecological impact of the modern agricultural paradigm is very apparent. Changes in Nebraska agricultural production will inevitably affect the U.S. agricultural model, which in turn will have a large effect on world agriculture because the United States is a dominant force in the neoliberal capitalist production system. In this system, developing countries essentially become locked into subordinate positions in global commodity production chains. Without change in the U.S. model, change in the rest of the system will be difficult due to the dependency relationship that developing countries have with the United States. Understanding how grassroots organizations contest the modern agricultural paradigm at the source and recognizing how change is accomplished from within the U.S. system might help in developing a model and methods that can be replicated and contribute to the realization of social change on a regional, national, and global scale. By understanding how change is possible with participation and coordinated action from subordinate groups, communities, and classes that are attempting to resist, contest, and transform the current structural relations controlling agricultural production in the United States, it is possible to apply a similar approach in other countries where comparable organizations are attempting to contest structural relations created by neoliberal capitalism.

This research is also relevant to the field of Development Studies in terms of social development. Bottom-up organization within civil society that effectively contests, confronts, challenges, and changes bourgeois-hegemony indicates that there is a political space where peaceful social change is possible through transformative politics. Social change through political participation is not limited to agriculturally-based organizations, and bottom-up organizational strategies for accomplishing change can be applied by any type of organized resistance: grassroots organization, community groups, and social movement in developing countries and in developed capitalist countries. Local organization and participation are important because the nation-state continues to be a critical sphere for the imposition of ruling capitalist interests, and any substantial modification in the economic, political, and cultural conditions of subordinate groups, communities, and classes will have to be fought and won at this level (Otero, 2004). Democratic development and the deepening of democracy are forms of social development that occur when civil society is strengthened through grassroots organizations and coalition building. If change in the current agricultural model can be achieved

in Nebraska by grassroots organizations, collective action, transformative politics, and political participation, then the possibility for change in the international agriculture production model may become a reality.

This research is significant and empirically original in the application of theory, and it is a contribution to the overall body of knowledge in the field of Development Studies. In theoretical terms, it is significant and original in two ways. Using a neo-Marxist approach to analyze civil society's role in transforming the modern agricultural paradigm with a Gramscian view of the state is unique. The phrase, 'civil society,' does not appear in most basic U.S. dictionaries, and an introduction of Gramsci into U.S. thought could help individuals recognize the importance of civil society (Buttigieg, 1995). Civil society is the realm of consent, and it is also considered everything non-government or the private sphere (Gramsci, 1971). Furthermore, a critical understanding of civil society is beneficial while creating and developing alternatives to current power structures, and a Gramscian-based analysis provides a unique approach to understanding social change in the United States. The second original theoretical aspect of this research is that it uses Political-Cultural Formation (PCF) Theory to analyze grassroots organizations in the United States. Political-Cultural Formation Theory has mostly been applied to organizations and social movements in Latin America (Otero, 2004) and in the analysis of social movements in developed countries like Canada (Grove, 2006), but PCF Theory has not yet been used in the analysis of grassroots organizations within the United States. Empirically, this research is also significant and original because of the specific grassroots organizations explored. It examines two rural- and agriculturally-based grassroots organizations in Nebraska, the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agriculture Society (NSAS), and how these organizations are helping producers 'survive modern agriculture' by contesting bourgeoishegemony.

Research Design

The chief goal of this thesis is to investigate the extent to which U.S. small- and midsized farmers have survived the modern agricultural paradigm and under what organizational conditions they have been able to do so. The research is structured around three main objectives, subsequent research questions, and a proposed hypothesis. The first objective is to identify and define the modern agricultural paradigm and explain its related social and ecological consequences in the United States. The second objective is to explore the key components of alternative agriculture, the social forces behind it, and the culture that binds the sustainable agriculture movement together. The final objective is to identify grassroots organizations, their responses to the modern agricultural paradigm, and their internal and external modes of participation. Answering the following questions will help provide the necessary background information needed for the research and help fulfill the research objectives. How do political-cultural factors affect the success or failure of counter-hegemonic organizations in Nebraska attempting to transform the modern agricultural paradigm? How has the class-structural process affected the agrarian class structure from which these organizations emerged? What are these organizations working for: complete structural change, ideological transformation, or a political space to work within the current system? What are the results of these organizations' actions at the local, national, and international levels?

The research hypothesis is: Grassroots organizations are transforming the modern agricultural paradigm by organizing themselves into political-cultural actors, shaping unified demands, and generating democratic leadership. Through these grassroots organizations, a paradigm shift has begun and an alternative, parallel system of agriculture is emerging.

Methodology

The research tools, techniques, and methods used to obtain the necessary data for this research included participant observation and semi-structured, open-ended, in-depth interviews with farmers and farm-organization leaders, and primary sources. Initially, primary and secondary source historical and contemporary documents were used to provide the structural and contextual background information needed to set the stage. This information helped identify the current state of U.S. agriculture, the hegemony of the modern agricultural paradigm, and social and ecological effects associated with this type of production. The data on alternative agriculture, the sustainable agriculture movement, and grassroots organizations in Nebraska was obtained by participant observation and through semi-structured, open-ended, in-depth interviews. Farm

tours, agricultural conferences, state and grassroots sponsored events, political rallies, farmers markets, organic supermarkets, health food restaurants, public hearings, group protests, keynote addresses, and interviews provided the primary data for the research. Surveys and questionnaires were used to identify possible interview participants and to get a general idea about producers' availability and willingness to be interviewed. They were also used to see how questions would be received by producers and to develop actual interview questions. The surveys and questionnaires were not used for statistical purposes and their results are in no way represented in this thesis. The surveys and questionnaires were used as a way to make initial contact with producers and other possible participants and as a preparation tool for the actual in-depth interview process.

Snowballing and participant observation were used to access the population of study, small- and mid-sized family farmers in Nebraska. The methodological goal was to integrate into the community, understand how this group lives and thinks, and to identify the group's worldview. A written record of the experience was kept in a research journal and audio recordings were created as notes. These methods were used throughout the research process to understand how such organizations function internally and externally, namely in relation to state institutions, transnational corporations, and other grassroots organizations. With a snowballing technique, a large network of possible interview participants for the research was developed (Clifford, French, & Valentine, 2010). Then, interviews and focal group discussions were used to identify these organizations' views, understand how they interact, and experience their internal group dynamics (Flowerdew & Martin, 1997). A broad spectrum of people was incorporated for this research, including individuals from conventional and alternative agricultural production and members of grassroots organizations and other activist groups. These individuals included farmers, community organizers, activists, agribusiness employees, government officials, and grassroots organization representatives. Observations were kept in a field journal and all interviews and focal groups discussions were recorded, notes were taken, and conversations were transcribed. This process provided the data necessary to evaluate these organizations, determine their level of solidarity, and evaluate their efforts. The specific organizations researched were the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agriculture Society (NSAS).

The data obtained helped develop an understanding of the regional culture, the level and type of state intervention experienced, and the leadership types and modes of participation developed by direct producers to contest bourgeois-hegemony. The data also provided the salient features of the two groups, explained the social conditions where they exist, and exposed the organizations' group dynamics. Interviews were conducted with the leadership of these organizations to highlight their composition, the main goals and stances, and the tactics used to achieve their goals. Participant observation at conferences, organization-sponsored meetings, and other sponsored and unsponsored organizational activities took place. After investigating alternative agricultural practices, individuals were identified from the list of people that had been created throughout the snowballing process and field research began. Once the initial information had been collected and partially analyzed, a second round of fieldwork followed. The research presented in this thesis is both quantitative and qualitative in nature, as a series of official statistics on United States, and Nebraska agriculture was also used to set the social-class structural context.

In August of 2010, I started talking with farmers and activists from my hometown area in southwestern Nebraska who were involved in agricultural production and associated with grassroots organizations. Using a snowballing technique, a network of possible participants was developed and then the participants with the most potential were chosen to be key informants (Blee et al., 2002). Participants were selected based on their specific knowledge, extensive experience, position within an organization, relationship to the subject, and/or physical geography. The participant's ability to communicate cultural issues, comment on organizational aspects, and explain the role of the organization's leadership was also taken into account while selecting participants. Data was obtained using overt participant observation techniques and through interviews.

The first round of interviews was conducted in person between August and December 2010, and a second round began in October 2011 and lasted until February 2012, with four follow-up interviews conducted in April and May of 2012. In the end, 35 interviews were conducted with 37 participants. Four interviews were with couples, and one interview was with four activists who were part of a coalition effort, and two participants were interviewed twice. All participants signed a consent form and/or agreed to the use of their interview in this thesis.

Anonymity was offered for all participants and will be respected throughout this thesis. Most interviews were conducted face-to-face, while eight were conducted over the phone. The conversations were recorded with a digital recorder and when appropriate, pictures were taken with a digital camera. Interviews were conducted with producers from three different regions in the state of Nebraska (Eastern, Western, and the Sandhills), and they lasted between 15 and 90 minutes, depending on the individual and the situation. Some of the interviews were rushed or cut short due to unforeseen circumstances.



Figure 1.2: Nebraska Reference Map

Source: (Maps of Net, 2012)

Overall, the interviews and participant observation aspects of the research were an amazing and eye-opening experience. I found that most participants that I spoke with were eager and ready to talk about their situation. Only once or twice did I feel that the participants were skeptical of me or my ambitions; however, everyone I spoke with was very polite, respectful, and helpful. That is not to say that the experiences with the CFRA and the NSAS were the same. Each organization has a different leadership hierarchy, and it took a different amount of time to

establish rapport with the organizations' members and be trusted enough to conduct interviews. As it turned out, most of the participants were members of both organizations I was investigating and were currently holding or had previously held a leadership role in the other organization at some time. The scope of the interviews was not limited by adhering to a specific set of questions, and subsequent questions were developed during the interview process to follow the natural flow of conversation. I initiated the theme or topic and then let the interview process run its natural course. Interviews were directed, but many times it seemed that the participants took the conversation in whatever direction they wanted to go. I did not try to limit the conversations, but I did attempt to keep to certain themes and focus throughout the entire interview process.

Chapter Outlines

Chapter outlines are provided here to highlight the focus of each chapter and give the general direction of the thesis. Chapter I has introduced the topic of research and identified the research design of the study: Nebraska agriculture and grassroots organizations contesting the modern agricultural paradigm and the current agricultural production model. It has justified the importance of this research and shown how this work is a contribution to the field of Development Studies that is significant and original. Chapter II examines the literature relevant to the research and addresses the necessary theoretical, conceptual, and contextual elements, including Gramscian concepts like civil society, the state, and the theorem of fixed proportions. An overview of Political-Cultural Formation (PCF) Theory, alternative agriculture, and development, as well as a discussion on farm size and structure are also provided in this chapter. Chapter III initially develops the historical background of U.S. agriculture by looking at changes and trends in population, technology, and agriculturally related legislation. The modern agricultural paradigm is defined, and associated social and ecological consequences caused by the U.S. agricultural production model are indentified. The chapter ends with an examination of class-structural process by sociologically re-interpreting quantitative information generated by the United States Department of Agriculture (USDA). Specifically, a breakdown of the class differentiation within the U.S. agrarian class is provided. The questions here are whether farmers are able to sustain themselves as such, are they facing a process of becoming semiproletarianized, or are they becoming part of the small, but increasingly concentrated agrarian

bourgeoisie? Chapter IV explores alternative and sustainable agriculture and shows how alternatives are being used to contest the modern agricultural paradigm. This chapter identifies resistance groups and grassroots organizations in Nebraska that are part of the sustainable agriculture movement and how the movement is being organized. Chapter V provides an analysis and evaluation of the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agriculture Society (NSAS) through PCF Theory. It also examines how these organizations are working with other resistance groups, like the Nebraska Farmers Union (NFU) and BOLD Nebraska, to form alliances and build coalitions. Chapter VI offers a recapitulation of the research findings, a short discussion on the challenges facing grassroots organizations, and some suggestions for enhancing the success of these organizations. Finally, the chapter concludes with ideas and thoughts on the possibilities for future research.

Chapter II

THEORY AND CONCEPTS

Certain theoretical elements need to be addressed in order to properly explain how subordinate organizations, communities, and classes are contesting the modern agricultural paradigm. This chapter develops the necessary theoretical, conceptual, and contextual elements of this research through a review of the literature relevant to the subject, including historical and contemporary writings from sociology, geography, economics, and political science. In order to provide the base and give a starting point to this research, the 'Agrarian Question' and class structure are discussed, followed by an explanation of Gramscian terms. The concept of development is explored next, and John Ikerd and the Missouri School of Rural Sociology have been very influential on the subject. Many of the terms and concepts tied to development and sustainability came from this school or were expanded upon by this school. The importance of community, sustainable development, and alternative agricultural structures and systems have all been topics of writing for Ikerd as well. The modern agriculture paradigm and alternative agriculture are also defined and differentiated by the Missouri School of Rural Sociology and scholars like Miguel Altieri. Finally, Gerardo Otero lays out the framework for the analysis of resistance groups and social movements through Political-Cultural Formation (PCF) Theory.

This research is based on a Marxist, historical-materialist conception of society, with a Gramscian view of the state. This approach provides a way to understand the structural impediments to change, the role of civil society in contesting hegemony, and the possibilities for change through collective action within U.S. capitalism. Based on the analysis of class relations and struggles which are shaped by the relations of production and the state, this approach can be used to explain the historical and contemporary structures of development in different regions and states on a global level (Berberoglu, 2009: 173). This analytical approach also allows for the realization of the potential for transformative politics of solidarity in a world where capitalist relations are extending and deepening (Rupert, 2005: 483). The CFRA, the NSAS, the NFU, and BOLD Nebraska all exist within the capitalist realm and are fighting for change by contesting the modern agricultural paradigm and capitalist agriculture. In Chapter III, farmers and agricultural

producers are differentiated and a class stratum classification for the agrarian class in Nebraska is developed, and Chapters IV and V look at alternatives to the modern agricultural paradigm and the grassroots organizations in Nebraska working on organizing the agrarian class, while this chapter gives a brief overview on the literature relevant to this thesis.

The Agrarian Question, Class, and Structure

The 'Agrarian Question' has long been a topic of debate in political and economic theory and in agricultural development and is a good starting point for research based on agriculture. For Marx, capitalist development in agriculture would lead to polarization and marginalization of the agrarian classes and, as farms grew larger, the peasantry would disappear or become incorporated into urban industry as part of the endless surplus labor force that was needed for industrialization (1974). Building on Marx's theory, Lenin further expanded upon the Agrarian Question by proposing the idea of peasant differentiation and suggested that the agricultural sector could provide the necessary resources for industrialization in different ways (1908). Both Marx and Lenin were concerned with the specification of structures in the transitional phase between classic modes of production, such as feudalism and capitalism; however, some scholars argue that, at the time, classic modes of production analysis did not necessarily apply to U.S. agriculture because of the debate as to whether U.S. agriculture is completely integrated into the capitalist mode of production because of the large number of family farms still in production (Chayanov, 1966; Djurfeldt, 1981; Kautsky, 1988).

Today, many aspects of these classic social and economic theories do apply to U.S. agriculture and, to some degree, Marx and Lenin's vision actually fits very well with the U.S. agricultural production system, in the sense that farming has gone from primarily subsistence production to an almost exclusive market orientation, with the relative number of farmers dropping from about 90 percent of the population to only two percent. Even if farmers are fully integrated into the capitalist market system, though, the question remains as to whether farmers have survived as a distinct class, or if they have been fully differentiated into a proletariat and a bourgeois, capitalist class. As discussed below, some farmers have been able to survive modern agriculture and are struggling to continue existing as a class in their own right. Some of these

survivors are even contesting the modern agricultural paradigm with alternative, sustainable practices, and these survivors are creating a new agricultural production system and shifting the current paradigm.

The debate over how to specifically define U.S. agriculture and differentiate the agricultural producer class is ongoing, and this debate applies to the class-structural process and class differentiation which are discussed in the next chapter. North American farmers conceived as a form of simple commodity production articulated to the dominant capitalist mode has been articulated (Friedmann, 1978; 1980); therefore, the theoretical framework to analyze U.S. agriculture within the classic modes of production does exist. The idea of peasantry as a unique mode of production or as a different type of economy within the structure of capitalist agriculture has been debated by some scholars, while others have emphasized the importance in differentiating between the class variations in the capitalist mode of production with relation to agriculture (Ennew, Hirst, & Tribe, 1977; Friedmann, 1980).

According to Marxist theory, society is divided into social classes according to their relationships with the means of production constrained at the structural level, and individual action is limited by strong relations imposed by underlying economic relationships. Marxist theory provides critical leverage for understanding the structures and dynamics of capitalism, capitalism in relation to the state, and the class-based powers and resistances it enables, while at the same time giving insight into social power relations which are dynamic, contradictory, and contestable (Rupert, 2005: 484). Contesting the modern agricultural paradigm is critical for farmers and agricultural producers if change is to be realized. The fundamental dynamic for real change in Marxist theory is class conflict. The class struggle that develops from the unequal distribution in wealth and from the inequalities of power and privilege that stem from the ownership of the means of production creates this conflict. Analysis based on this theory provides a description of social change in a specific time and place, and it also provides a prescription for social change that enables a move towards a social structure that functions more justly and is egalitarian in social life and action (O'Malley, 2009: 255). Two chapters of this thesis address class issues, as well as social power relations directly related to politics and social reproduction, social movement formation and its relationship with the state, and the classstructural process. While this general conceptualization of class sets the objective structural

limits in which political struggle takes place, I will argue that the political-cultural formation of subordinate groups, communities, and classes is mediated by three determinations: culture, state intervention, and leadership types. In order to address this argument, Gramsci's view of the state is briefly described.

The State, Hegemony, and Civil Society

Gramsci provides many of the essential conceptual elements necessary for the interpretation and understanding of grassroots organizations and their leadership in relation to the state and civil society. Gramsci's view of the state differs from mainstream liberal economic thought because of the emphasis and importance given to social classes and class relations, social classes and power relations within society, and class struggles within the state (Berberoglu, 2009: 170-171). When applied to the analysis of the U.S. agricultural model and its relation to civil society, this approach allows for the examination of organized resistance and grassroots organizations and the possibilities for social change through political mechanisms. This type of approach allows for the analysis of power structures, and it provides an understanding of how social change is made possible from within those structures, and on how organized resistance and grassroots organizations are responses by subordinate groups, classes, and cultures from civil society that organize to contest bourgeois-hegemony. This kind of approach provides a multidimensional focus where collective action, class consequences, and the overall impact of a resistance group can be examined (Kebede, 2005: 82). This research focuses on Nebraska grassroots organizations and their leadership and on how they are trying to organize the agrarian class.

Gramscian conceptual elements incorporated in this research are: the state, civil society, hegemony, and the political party. Gramsci views the state as the complex entirety of political and theoretical activity that the ruling class uses to justify, maintain, and obtain active consent of its dominance over those who are governed (Gramsci, 1971: 12-13; Femia, 1981). The idea of the 'state' is very important, especially when dealing with a developed, liberal democratic nation such as the United States. As defined by Max Weber (1978), the 'state' can be thought of as possessing the legitimate claim to the monopoly over the use of physical force over a given

territory. This generally-accepted definition of the state roughly coincides with Gramsci's 'political society,' or the 'state' in a strict sense. For Gramsci, however, the state is to be understood more broadly as the totality of political society and civil society. Political society, as in Weber, is the realm of force and domination, whereas hegemony of the dominant social group is exercised through civil society private organizations (Gramsci, 1971: 244-245). Hegemony, then, is rule not simply by the force of the state, but actually through the moral and intellectual leadership of the ruling class. The interests of this ruling class then become accepted as valid and universal; therefore, hegemony refers to the cultural leadership exercised by ruling groups (Gramsci, 1971; Femia, 1981; Kebede, 2005). This leadership is expressed by organizations from civil society that act to support the hegemonic project, and thus are representative of bourgeois-hegemony to the extent that they accept the development project of the bourgeoisie.

At the same time, grassroots organizations and subordinate groups, communities, and classes that do not accept bourgeois-hegemony exist in civil society as well, at least potentially. In developed capitalist nations, an armed uprising against the ruling class and the government is not a feasible option, not least because these countries are usually democracies. Power must be attained through consent and not through violent struggle. For this reason, hegemony must be obtained peacefully by opposition and resistance groups in order to be legitimately recognized by society and the state. In the United States, the pervasive influence of liberal economic tradition identifies the state with government, and the government poses a threat to freedom (Buttigieg, 1995), but Gramsci sees a democratic state and the control of hegemony as freedom. Democracy means that the people take control of the state by consent, and as the state, the people are then able to contest, challenge, and change hegemony and achieve freedom.

The goal of these counter-hegemonic social groups is to gain consensus for a populardemocratic, participatory system with the goal of betterment for the whole of society as its ideological base and foundation, as opposed to exploitation within a repressive system that is only nominally democratic. Gramsci's concepts of civil society and hegemony help explain the structure and power relations within capitalist states claiming to be democratic (Buttigieg, 1995). The CFRA and the NSAS both exist within the democratic United States which is a leader of neoliberal globalized capitalist development. These grassroots organizations operate as counterhegemonic organizations from civil society that are contesting hegemony as a response to the social, ecological, and economic issues that have developed along with modern agricultural production.

The question then becomes whether or not these counter-hegemonic social groups can develop sufficient awareness and organization to contest bourgeois-hegemony. Organizations from these subordinate groups, communities, and classes may attempt to develop and promote a popular-democratic hegemonic project contesting bourgeois-hegemony. Struggling for a popular-democratic project is more likely and more easily achieved when more organizations of this kind exist. In turn, civil society is strengthened when more of these types of organizations exist and form coalitions and alliances. Hegemony is legitimized, strengthened, and reproduced in the social, political, academic, and cultural realms of life (Gramsci, 1971; Kebede, 2005). Organized resistance, grassroots organizations, and social movements may become the critical part of civil society that form around different ideologies to contest bourgeois-hegemony, but still have a similar goal.

Other Gramscian concepts are also incorporated in this thesis and they relate to the intellectuals, leadership, and leadership formation in social groups and political parties. All social groups naturally develop one or more categories of intellectuals within their ranks, and these intellectuals help bring awareness to the group in political, social, and economic fields (Gramsci, 1971: 5). When subordinate groups and classes struggle for dominance or hegemony within civil society, intellectuals play a pivotal role. Subordinate classes and cultures must work to assimilate and conquer the intellectuals of the opposing class by defeating their ideology. Conquering and assimilating ideology is more easily achieved if the 'organic intellectuals' of the subordinate group are articulated and elaborated. The formation and recognition of these organic intellectuals is essential to class organization and in the battle against bourgeois-hegemony. Hegemony is exercised by the dominant group throughout civil society, and their intellectuals are the 'deputies' exercising these subaltern functions of social hegemony and political government which are mostly connective and organizational by nature.

Traditional and organic intellectuals are two types of intellectuals that Gramsci refers to, and they are necessary pieces for any social group trying to unite behind a political party (Gramsci, 1971: 7-15). Traditional intellectuals are those formally trained in educational institutions, whereas an organic intellectual is formed through life and the development of the

social group (Gramsci, 1971: 15). Subordinate groups articulate their intellectuals through the political party. Gramsci sees that political parties are composed of three essential parts: a mass element, a principal cohesive force, and an intermediate element, and the party functions most efficiently when these three elements exist in the proper or fixed proportions (Gramsci, 1971: 152). When political parties, social groups, or movements achieve their specific fixed proportions, the organization and the movement become much harder to put down. That is not to say that subordinate groups will be more likely to succeed in achieving hegemony if these proportions are met, but defeating the group as a whole becomes much more difficult (Gramsci, 1971: 153).

At the same time, subordinate organizations must always be prepared for defeat by bourgeois-hegemony and, therefore, must prepare for the future of the organization. Preparation for defeat means developing the successors of the movement and providing them with the necessary tools to continue in the struggle. That is why the development of leadership is an important aspect for grassroots organizations that are contesting hegemony. One speaks of generals without an army, but in reality it is easier to form an army than to form generals (Gramsci, 1971: 152-153). Thus, if an organization is not to rely on charismatic-authoritarian leaders who can be easily eliminated or bought out, it must have a concerted policy of leadership formation and rotation. Gramsci's concept of civil society, which is intertwined with his theory of hegemony, is important because it exposes the mechanisms and modulations of power in capitalist states that purport to be democratic (Buttigieg, 1995), and democratic development and the deepening of democracy are critical elements in social and political development (Dryzek, 1996).

Development and Sustainability

The concept of development can be approached and interpreted in various ways. One interpretation of development is: providing improvements in the human condition, and the changes needed to achieve those improvements (Parpart & Veltmeyer, 2003: 2-3). Many approaches to development have been proposed based on different theoretical perspectives, and depending on time and place, the process of development has taken on many different forms. In

the contemporary world, the idea of development as a project was created after World War II by the U.S. government in an attempt to improve the quality of life for the majority of the world and to prevent the global south from being attracted to the communist project expanding in the Soviet Block and China (Parpart & Veltmeyer, 2003: 2). In all reality, the notion of development can be traced back much further than World War II; however, the idea of development as a world project is relatively new (Escobar, 1995; McMichael, 2009).

The U.S.-led development project was founded on liberal economic beliefs around the free market, and its focus and measure of success are based on economic growth. However, after decades of this type of development, it has become clear that development focused only on economic growth has failed to encompass all aspects of the social world and failed to provide any type of equal or even world development (Nixson, 2006: 971-973). This type of development has shaped the modern agricultural paradigm and U.S. agricultural hegemony, but as John Ikerd points out, many rural and agricultural communities have become "the dumping grounds for the rest of society" as a consequence (2001b). Agricultural development has proven to be economically beneficial to the United States and transnational agribusiness corporations; however, development measured in purely economic terms has led to many social and ecological issues. In development guided by economic value productivity, profitability, and capital accumulation, the value of human life and the environment are overlooked because people and places are reduced to a quantifiable dollar amount (Ikerd, 2011a). Due to the failure of economic growth driven development, at least in human, environmental, and social terms, new approaches to development have been pursued. This new development paradigm being introduced is more human-centered and it consists of a locally driven model that is not completely based on economic parameters.

'Development' has been used by many authors in various contexts to explain past events and to guide new advancements. The idea of 'development' is influenced and based on Otero's conceptualization of 'desirable development,' and Ikerd's explanation of 'sustainable development.' Desirable development, as Otero discusses, is an approach to development where success is measured and understood as more than just a numeric function of economic growth (1996), and desirable development is how development will be conceptualized within this thesis. More specifically, desirable development implies a human-centered type of development based on social and ecological sustainability with an economic-growth component, or as Ikerd calls it, 'sustainable development' (Ikerd, 2001b; 2007a; 2007b; 2011a). Sustainable development implies a change from the current mechanistic worldview to an alternative organismic worldview in which the world is viewed as a living entity (Ikerd, 2010b; 2010a). In this paradigm shift, development is seen as a renewable and regenerative process in nature, as are all social, ecological, and economic systems (Ikerd, 2007a; 2007a; 2010b; 2011a). Sustainable development applied to community translates to meeting the needs of all in the present while leaving equal or better opportunity for those in the future (Ikerd, 2001b).

When applied to agriculture, sustainable development means a new sustainable agricultural paradigm in which the common farming philosophy is creating a sustainable living system that is diverse, holistic, and interdependent. Sustainable development means creating a society guided by the principles of sustainability in all aspects of life (Ikerd, 2011a). Establishing new markets, developing an alternative economic system, and changing the current agricultural production model are steps towards sustainable development (Ikerd, 2010a). Sustainable development addresses the long-term goals and needs of the local community and this process starts with local dialogue and community organization (Ikerd, 2001b). Through organization, grassroots organizations, and resistance group alliances, individuals working together for the common and collective goal are represented, and in turn, have the ability to affect change in the political, social, cultural, and economic aspects of development (Griesgraber & Gunter, 1996: 91-95).

If this is the case, the issue then becomes changing the current system into something that will facilitate desirable development based on the tenets of sustainability, and shifting science, economics, and development paradigms to alternative paradigms based on sustainability (Ikerd, 2001b; 2005). Alternative development paths often center on food production and food systems, and the creation of an alternative, parallel economic system that is not controlled by profit margins and accumulation is one step towards sustainable development, sustainable ecology, and a sustainable society. Alternatives are being used to contest the modern agricultural paradigm, and alternative agricultural producers using these alternatives are being organized and becoming part of the sustainable agriculture movement. The sustainable agriculture movement and the fight for class interests are discussed later in this chapter, as well as in Chapter IV.

Modern Agricultural Paradigm

Conventional and industrial agriculture and their connection to the modern agricultural paradigm need to be explained and the modern agricultural paradigm defined in order to contextualize this thesis. Briefly for now, though, and elaborated in the next chapter, the modern agriculture paradigm is to be understood as more than just industrial and conventional agriculture, but also as the transnational corporations and businesses outside of the United States that are not directly involved in agricultural production. Transnational corporations that are part of final food production and distribution processes, and companies involved in the production of agricultural inputs are included as well (Otero, 2012). The international nature of agriculture and the increasing trend toward globalization have resulted in a high number of transnational corporations entering into the agricultural sector, and even finance capital is now invested in futures commodities markets. This speculation in futures has been pointed to as a key factor in the food-price crisis that was set off in 2007 (Bello, 2009). Many of the largest players in world agricultural production, international commodity trading, and food processing and retail are headquartered in the United States and are influential economic players in the modern agricultural paradigm. The U.S. agricultural model and capitalist agricultural production are exported and promoted in international development, and this exportation and promotion are some of the elements that define the modern agriculture paradigm.

Historical analyses and descriptions of the development of U.S. agriculture are numerous (Cochrane, 1979; Fink, 1992; Stanton, 1993; Danbom, 1995; Gardner, 2002; Hurt, 2002a; 2002b; Dixon & Hapke, 2003), and they provide the background information for this research from the establishment of the United States and Jeffersonian agrarianism in the 1770's, to the 1980's and neoliberal restructuring. Descriptions, explanations, and analyses of the current state of U.S. agriculture and the social and ecological issues associated with modern agricultural production are numerous and wide ranging. Social aspects of agricultural and food production like labor sovereignty issues created by modern agricultural production (Buttel, 2003; Jackson-Smith & Buttel, 2003), labor sovereignty issues and the relation to food production (Otero, 2011), and the socio-economic impact of agriculture and food production in the Great Plains (Funk & Bailey, 2000; Bailey & Preston, 2003; Henderson & Akers, 2008; Bailey & Preston, 2011) have all been

developed, discussed, and related to migration, systemic poverty, and social mobility. The effects of conventional agriculture and agriculture's relation to climate change (Johnson, 2009; Gomiero, Paoletti, & Pimentel, 2011a) have also been detailed, as well as neoliberalism in agriculture.

The influences of neoliberalism and globalization have affected the direction and style of U.S. agriculture in many ways (Barkley, 1988; Goetz & Debertin, 1996; Foladori & Wise, 2009), and these influences have provided the rationale for the international institutional framework that guides world agricultural production today (Foladori & Wise, 2009; Petras & Veltmeyer, 2010). This new framework for agriculture now includes more technology-related issues and an increased international regulatory component (Gibbon, 2008; Otero, 2008; Pechlaner & Otero, 2008; 2010), both of which are directly linked to biotechnology. The effects of biotechnology in agriculture (Kloppenburg, 2004), the monopolization of genetic resources (Otero, 2008), and the establishment and enforcement of intellectual property rights (Buttel, 2000; Busch & Bain, 2004; Pechlaner & Otero, 2008; Pechlaner & Otero, 2010) all have social and ecological implications. They have affected the direction of change in U.S. agricultural production, as well as encouraged new players such as pharmaceutical companies and investment firms to enter into the agriculture game.

The current agricultural development goals of the World Trade Organization (WTO), the World Bank (WB), and the International Monetary Fund (IMF) continue to promote the integration of small farmers into the global commodity market, and the U.S. failure to recognize legitimate alternatives to the current food and agriculture crisis shows that no real alternatives are being discussed. Alternatives in development policy and strategy are needed to create a new agricultural paradigm which is democratically grounded and attentive to cultural and biological diversity (McMichael, 2009; McMichael & Schenider, 2011). Alternative energy sources, environmentally friendly and sustainable farm practices, and an end to subsidies in developed countries have all been suggested as ways to begin addressing the agricultural development crisis, but some think that actual change depends on organizing small- and mid-sized producers in the United States and across the world (Bird & Ikerd, 1993; John, 1993).

Alternative Agriculture

Multiple alternatives to the current agricultural production model have been proposed, and defining alternative agriculture is an important part in differentiating between producers. Various approaches to production, processing, practice, marketing, and distribution have all been considered alternative, and these alternatives are discussed in-depth in Chapter IV in terms of people, perceptions, production, and markets. From crop selections and in-field farming practices to operation management techniques and green energy production, alternatives to conventional agricultural production have manifested themselves in diverse ways, and the organizations that have formed to contest the modern agricultural paradigm have united behind unique motives. Some research on alternative agriculture has focused on the producer and alternative methods for production has also been explored (Ingram, 2007; Pearson, 2007; Patzek, 2008). The beliefs, values, and motivations behind alternative agriculture, the development of the sustainable agriculture movement, and differences between sustainable and conventional agriculture have also been indentified and analyzed (Berry, 1977; Beus & Dunlap, 1990; Bird & Ikerd, 1993; Jackson, 1996; Ikerd, 2001b; Jackson-Smith & Buttel, 2003).

Developing the subject of alternative agriculture even further is Miguel Altieri with his work on agroecosystems (1994; 1999). Altieri explains how agroecology is a self-sustaining, low-input, diversified, and energy efficient system of agriculture where the restoration of biodiversity in the landscape is the goal (1994). Agroecology is one approach to alternative agriculture that is sustainable and designed not only to meet current ecological challenges, but also to meet socioeconomic challenges present in the agricultural production model. These systems stress conservation and regeneration of biodiversity, soil, water, and other natural resources (Altieri, 1999). Each agroecosystem will be different because the producer works with the natural landscape and tries to mimic the natural ecological process in the geographic location. The main components of agroecosystems are discussed by Altieri, and he highlights the role and importance of productive, resource, and destructive biota (Altieri, 1999). Productive biota consists of chosen crops, trees, and animals; resource biota help with biological control, pollination, and decomposition; and destructive biota consist of weeds, pests, and insects, and the main strategy of agroecology is to exploit the complementary relationships that exist in

polycultures of plants and in mixed crop-livestock systems (Altieri, 1999). Knowledge and management are necessary elements in designing and maintaining an agroecosystem, and factors like crop arrangement, non-crop vegetation, soil type, and the surrounding environment all need to be taken into consideration. When managed correctly, agroecosystems are a sustainable alternative to the current agricultural production model and to conventional and industrial agriculture.

Alternative supply chains, distribution networks, and food systems have been the main focus of other recent studies (Rosset, 2008; 2009; Andree, Dibden, Higgins, & Cocklin, 2010), and recent literature in agrifood studies has also developed the consumption/consumer aspect of agricultural production and explored the importance of the relationship between consumers and producers in the creation of alternative and local food systems (Goodman, 1999; Goodman & DuPuis, 2002; Guthman, 2002; Hendrickson, 2009). Local and alternative food systems and the creation of a parallel economic system are seen by some as important steps in contesting hegemony and reestablishing democracy (Ikerd, 2001a; 2010a). The role and effect of consumers in food production and the producer-consumer link are further developed with literature regarding the corporate takeover of alternative and organic markets (Johnston, 2008; Johnston, Biro, & MacKendrick, 2009b; Johnston & Baumann, 2009a). These focuses help shed light on alternative agriculture and the wide span of applications and interpretations it carries. These perspectives help develop the context in which alternative agriculture is used in this research; however, the role and analysis of rural- and agriculturally-based organizations in the United States and their influence on alternative agriculture and the sustainable agriculture movement are still underdeveloped.

Resistance and the Sustainable Agriculture Movement

Social, agrarian, and farm movements and the organizations behind these movements are also related to this thesis. The formation of international peasant and farm movements and their response to the globalization of the industrialized and U.S. led neoliberal agricultural production model have been analyzed, and the importance of international political alliances has been highlighted (Desmarais, 2002; 2007; Borras, 2008; McMichael, 2008). The ideas of food sovereignty, food vulnerability, and food dependency, as well as rural autonomy in a globalized world, have been addressed and advanced by other scholars (Rosset, 2008; 2009; 2009; Wittman, 2010; McMichael & Schenider, 2011). These authors address the relationship between globalized modern agricultural production and international food prices, supplies, and distribution articulated by the food crisis. Facing this crisis, foreign peasant movements and other agrarian movements have responded by challenging U.S. dominance and agricultural hegemony from outside the United States; however, confronting U.S. hegemony at the source is underdeveloped.

Traditional methods and approaches used in contesting and challenging the hegemony that controls these forces must be expanded, explored, and developed and these efforts organized at the local, regional, national, and international levels. This thesis will offer an internal approach to contesting U.S. agricultural hegemony at the source through political participation and class and community organization. Approaches to political change by grassroots organizations differ greatly between the United States and developing countries, but many of the goals are the same; namely, creating an agricultural model that is socially and ecologically sustainable, returning the power of choice back to small- and mid-sized producers, and offering an alternative to current development and production trends (Desmarais, 2002; Ikerd, 2004; 2005; Desmarais, 2007; McMichael, 2008; Ikerd, 2011b).

Resistance to modern agricultural production has taken different forms, and one form of resistance is through grassroots organizations. Grassroots organizations constitute organized resistance that contests the modern agricultural paradigm and challenge bourgeois-hegemony. These organizations mobilize behind similar ideology and use various methods and tactics to confront the different aspects of hegemony. In the United States, the sustainable agriculture movement is organizing the agrarian class, like-minded grassroots organizations, and other groups and individuals to contest the modern agricultural paradigm. The sustainable agriculture movement is similar to other historical agrarian movements except it contains a greater ecological element, and the environment, sustainability, local control, and reconnecting the producer and consumer are key issues (Beus & Dunlap, 1990; Bird & Ikerd, 1993; Ikerd, 2001b; 2004; 2005; Altieri, 2008; Ikerd, 2011b).

The sustainable agriculture movement has been around since the early 1980's and Ikerd identifies three distinct streams of thought and agricultural-related movements (2004; 2005). Traditional family farmers, rural communities, and organic farmers originally came together behind sustainable production, protecting their lifestyles, and being able to earn an acceptable living. Sustainable agriculture is a form of sustainable development that promotes a more socially just, economically viable, and environmentally sound type of agricultural production where the alliance between producer and consumer is of strategic importance (Altieri, 2008). Strategically, buying locally has become more important than buying organic within the movement, and establishing a personal connection and understanding between consumers and producers is strengthening the movement. The sustainable agriculture movement supports many aspects of alternative agriculture as well, such as alternative farming methods, direct markets, rural community development, and healthy food systems (Ikerd, 2004; 2005). The potential for growth of the movement and the need to organize the movement has been pointed out by Ikerd (2004). Ikerd argues that the best avenue for the growth and success of the movement is through a focus on and a coming together around local, sustainably-produced foods.

Organizing the movement is the other key to success, and building coalitions between different grassroots organizations and establishing new alliances between producers and consumers has raised public awareness and strengthened the sustainable agriculture movement. This thesis explores grassroots organizations in Nebraska that are part of the sustainable agriculture movement and examines their efforts in consolidating the movement and contesting the modern agriculture paradigm. Politically, economically, intellectually, and culturally, these organizations are contesting the complete modern agricultural paradigm and confronting the social and ecological challenges associated with the current agricultural production model in an attempt to create a new, popular-democratic, hegemonic project. All along the commodity chain, from production methods and market strategies to consumer involvement and public opinion, these organizations and the sustainable agriculture movement are challenging the power that guides and directs agricultural production in the United States and abroad.

Political-Cultural Formation and Civil Society

The strengthening of civil society and the level of success in contesting the hegemony of modern agriculture can be analyzed through the application of Political-Cultural Formation (PCF) Theory, which has previously been referred to as political-class formation. Given that the theory can and has been applied more broadly to include groups and communities, it has been relabeled as political-cultural formation. This renaming also corresponds to the fact that both political and cultural factors are central to the analysis beyond the economic-structural positions of groups, communities, and classes. What this approach attempts to do is overcome the economism and class-reductionism of earlier Marxist analyses (Laclau, 1977).

The deepening and development of democracy involves strengthening civil society, and PCF offers a way to understand how subordinate groups, classes, and communities become organized to fight for their own interests. Political-Cultural Formation is defined as the process through which direct producers and other exploited and/or oppressed social groups shape demands, form organizations to pursue them, and generate a leadership to represent them before the state and other organizations with which alliances are built (Otero, 2004: 332). It has been applied to peasant and indigenous groups in Mexico and Bolivia (Otero, 1999; 2004; 2012; Gilbreth & Otero, 2001; Otero & Jugenitz, 2003; Salt & Otero, 2011b), and to the gay and lesbian movement that led to same-sex marriages in Canada (Grove, 2006).

Agricultural producers and rural communities in the United States are recognized as a cultural group with distinct traditions and a unique historical past (Ikerd, 2001b; Slama, 2004; Ikerd, 2007b). Rural communities and agriculturally-based counties on the rural Great Plains saw the greatest population decline, experienced the greatest and most wide-spread poverty, had persistent low earnings and income, and the highest reliance on unearned income from 1970-2000 (Bailey & Preston, 2003; Bailey & Preston, 2011). From 1988-1997, the three poorest counties in the United States were in Nebraska, and 18 of the 50 poorest counties in the nation were also rural Nebraska counties (Funk & Bailey, 2000).These producers and rural communities continue to be one of the most marginalized and exploited groups in the United States and they represent subordinate groups, communities, and classes. Organization among them is a factor in strengthening civil society, developing a participatory democracy, and obtaining favorable intervention by the state that supports their interests (Otero, 2004: 325-327). The self-awareness

and organizational capacity of grassroots organizations and other subordinate groups are also key factors in creating class capacity to fight for common interests and contest bourgeois-hegemony. Political-Cultural Formation is the process by which subordinate groups, communities, and classes form organizations to struggle for their interests. Political-Cultural Formation analysis explores the class-structural process from which subordinate organizations emerge along with three mediating factors, and PCF Theory proposes that regional cultures, state intervention, and leadership types and modes of grassroots participation are the mediating determinants between the class structural processes and political-cultural-formation outcomes. Regional culture forms the basis on which the group shapes its demands, state intervention shapes the character of the class organization, and leadership types, along with modes of participation, shape the group's independence from, or dependence on, the state; their autonomy for self-management; and the types of alliances formed with other groups, communities, and/or classes (Otero, 2004: 332).

The class-structural process addresses the fact that not all agricultural direct producers have the same size farms or the same relative power. There is, in fact, a strong process of class differentiation within farming communities, and this differentiation has an impact on the potential for political-cultural formation. Class differentiation also generates a distinction of class interests and, therefore, diverse potential for awareness, organization and contestation. The class structural process is thus defined as the larger socioeconomic context into which direct agricultural producers are inserted. It is causally linked with regional culture, state intervention, and leadership type. Yet, the specific causal links between class structure and political-cultural formation are hard to specify. This is why PCF proposes to focus on the three mediating determinants mentioned (and discussed below). The PCF perspective will be used in this research to analyze grassroots organizations in Nebraska contributing to the sustainable agriculture movement and rural development by organizing agricultural producers, rural communities, and urban consumers and activists.

Regional culture forms the collective identity of the subordinate group, community and/or class, shapes local demands by the people, and identifies who they target as their objects of struggle (e.g., the state and/or corporations) (Otero, 1999). How the class wants its culture to be reproduced, how it relates to the dominant form of production and its relation with the dominant culture are aspects that affect the collective identity of the group (Otero & Jugenitz,

2003). Regional culture is also the common or shared experience of the individuals in the group or class with the outside world, as well as the interaction among group members within the organization. It is the localized experience in relations between the exploited, i.e., the relations of reproduction; and in the relations with the exploiter, i.e., the relations of reproduction.

State intervention affects the capacity to defend the interests of the class and influences the character of the class as well (Otero, 1999). State intervention includes both state and federal responses to an organization or class, how the government has expanded or shrunk political openings, and how the government portrays the class or organization. State intervention usually responds to hegemonic interests and values, but in advanced capitalist society it must also respond to the interest of ascending subordinate classes if it is to guarantee its legitimacy. The character of state intervention from the perspective of the subordinate class, community, or group interests is either favorable or unfavorable, and it will affect and influence the character of the class. Political-Cultural Formation Theory presupposes three main types of state intervention: first, there can be interventions favorable to subordinate groups but that result in their cooptation by the state. Co-optation means that while receiving concessions from the state, the group loses a major degree of independence and, therefore, reinforces bourgeois-hegemony. Second, there is the negative or repressive state intervention: this is the state's declining to meet the organization's demands, or even represses its mobilization. If repressive state intervention is severe, it may lead to demobilization of the class; however, it may also aid in generating more oppositional organizations, strength and determination. Finally, there can be favorable intervention which is the result of organized pressure from below. In this case, state intervention can be labeled popular-democratic in that policy is favorable to subordinate groups or classes. Popular-democratic intervention strengthens civil society, and it signifies that the mobilized organizations retain their independence from the state, yet are still successful in influencing state policy in their favor (Otero, 2004).

Leadership types and modes of grassroots participation are the final mediating factor, and they directly affect organizational strength, its level of independence from the state, as well as its autonomy from other political organizations for its internal governance or self-management, and also the kinds of alliances established with other groups or classes (Otero, 1999; Otero, 2003; Otero, 2004). Leadership is a vital aspect of mobilization and it is important in generating, maintaining and expanding the leadership of the organization, gaining public support, and working with other organizations to build relevant and effective coalitions. Mobilization equals the leadership and internal communication of an organization in addition to the use of connections outside the organization's membership. Accountability, the creation of alliances, the ability to represent constituents, and the promotion of grassroots participation also fall under the mediation of leadership types and grassroots modes of participation.

These political-cultural factors directly relate to how grassroots organizations mobilize, as well as the political approaches organizations use to contest bourgeois-hegemony and accomplish their goals. Three ideal types of leadership have been proposed for the Mexican case (Otero 2004), and these leadership types, as well as other leadership type classifications, will be used in this research specifically for the U.S. case. Based on Max Weber's (1978) initial and general characterization, the charismatic-authoritarian, the corrupt-opportunist, and the democratic-participatory leader are used to describe leadership styles in Mexico. The charismatic-authoritarian type involves a leader that may retain more independence from the state, but may be less accountable to the constituency. The corrupt-opportunist may be more accountable to the people he or she represents, but is less likely to have the group's best long-term interest in mind, so could compromise for short-term concessions. This action may lead to the organization's loss of independence from the state and final co-optation into bourgeois-hegemony. Finally, there is the democratic-participatory leadership which insures that both independence and autonomy are preserved, and the group's best long-term or historical interest will be the main focus of action.

A deeper, participatory democracy means organized voter participation, public debate, and political involvement by the people, and people must exercise their democracy in order for an alternative economy to emerge (Lipietz, 1992). At the same time, individuals are not the agents of social change in a representative electoral democracy and, therefore, organizations from civil society representing those individuals are essential and the real agents of change. The U.S. political system is set up in such a way that elected officials represent the constituents that voted them into office, and there are mechanisms to remove officials who are not representing their constituents. Initiative, referendum, recall, and term limits are all examples of those mechanisms, and the U.S. political structure is set up in such a way that the demands of the people are represented if they participate in the political process. Grassroots organizations and their ability to build coalitions and partnerships are directly related to the organizations' leadership, effectiveness in the political arena, and how demands are received by the government (Flora & Flora, 2008). Cooperation between grassroots organizations and other groups from the subordinate classes is a key element and an essential part of a functioning democracy, and inter-organizational cooperation is necessary to establish a popular-democratic hegemonic project.

Despite the extensive body of literature applying to agricultural development and social movements, there is little written about grassroots organizations in Nebraska that are contesting the modern agricultural paradigm. These organizations' internal organizational strength and capacity, approach to contesting the modern agricultural paradigm's hegemony, and their degree of success in transforming it are factors that need to be addressed. This research addresses these and other issues related to sustainable agriculture and class organization. It does not try to identify the most effective method for accomplishing structural change; instead, it examines the regional culture of sustainable agriculture practitioners in Nebraska, how the agrarian class is organizing, the response to these organizations by the state, and the leadership and modes of participation of organizations that are part of the sustainable agricultural movement. Additionally, the level of success these organizations have had in helping small- and mid-sized producers survive modern agriculture will be assessed. An examination of these organizations through PCF will provide a unique perspective and original analytical approach to their understanding, as well as an attempt to fill part of the gap in the literature that exists in this area.

Chapter III

MODERN U.S. AGRICULTURE AND THE CLASS-STRUCTURAL PROCESS

In order to understand the origins of rural- and agriculture-based grassroots organizations like the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agriculture Society (NSAS), an examination of the historical configuration of the agrarian class-structural processes is necessary. The agrarian class-structural processes constitute the larger socioeconomic context into which direct agricultural producers are inserted and have evolved as social classes. It addresses the fact that not all direct agricultural producers share the same size farms or the same relative power. In fact, farming in the United States has become sharply differentiated between a decreasing number of ever larger, mostly capitalist corporate farmers on one hand, and a semiproletarianized class of farmers with farm sizes that are so small that they are no longer viable or sustainable in the economic environment provided by the modern agricultural paradigm. In between these two extremes, there is a diminishing number of small- and mid-sized family farmers who have been able to sustain themselves as such. Many of these farmers, along with a growing number of small, under-subsistence, semi-proletarianized farmers, are increasingly unable to generate economic incomes from agriculture alone. For small- and mid-sized producers, income has increasingly come more and more from non-farm incomes since the 1970s, a process which has been heightened by the neoliberal reformation of capitalism since the 1980s. In addition to providing the historical background of U.S. agriculture and discussing some of the ecological and social consequences associated with modern agricultural production, this chapter also explores the class differentiation that has occurred among agricultural producers in Nebraska. It provides a region-specific contemporary examination of the class-structural situation in the state.

Classes and Agrarian Structure

For this chapter, I am re-categorizing the USDA's several classifications of the U.S. farm structure to offer a sociological understanding of the agrarian class structure in Nebraska. While

the USDA's classifications are all gradational, along several categories such as hiring labor, total sales, acreage, etc.; my goal here is rather to cluster the various categories along class lines. Classes are not merely gradational, but relational categories; they denote the relation of classes to the means of production, their control over labor power (their own and/or that of others), their possibilities of appropriating portions of the surplus product and, therefore, the types of social relations in which classes are immersed (Wright, 2002). For instance, there is a huge difference between farmers who systematically must sell their labor power to subsidize their farm operations and those who systematically hire labor to operate their otherwise highly mechanized operations (Friedmann, 1978). The first case, systematic sale of their own labor power, is likely about an infra-subsistence, semi-proletarianized farmer; while the second case, systematic buying of labor power, relates to a capitalist family farmer or a corporate farm.

In order to assess whether Nebraska farmers can survive modern agriculture or not, one must first have a clear idea of their location within the broader agrarian class structure. To this end, the various class locations of direct agricultural producers will be broken down into a five-tier class categorization: the lower three are different strata of simple commodity producers (and sellers of labor power) and the top two are both capitalist, family or corporate. Each of these categories responds to the question of the extent to which farmers are able to at least sustain the simple reproduction of the farm operation; that is to say, to not sustain losses that would make them unviable as farmers, nor gains or profits that would put them in the situation of hiring labor beyond the family household or intensifying their operation on the basis of more capital investments. Below simple reproduction are infra-subsistence or semi-proletarianized farms; above simple reproduction exist the conditions for farmers to become capitalist.

The bottom direct-producer class in U.S. farming is infra-subsistence, a semi-proletariat, precisely in the sense that farmers in this class cannot sustain a scale of simple reproduction. Rather, they must rely on non-farm incomes to make a living. In class terms, therefore, they can be labeled semi-proletarian farmers in that they are torn between farm production and wage incomes to make a living. These are farms that receive around half or more of their income from off-farm sources, including the sale of labor power.

Subsistence family farms make up the second category. In class terms, these farms can be labeled simple commodity producers, family farmers, or peasants. These farmers are not working

for profits in the strict sense of the word, but rather they seek to reproduce their own labor power, which does not entail a profit in capitalist terms. It is most likely that these farms are just keeping their standard of living, not accumulating money, and not hiring wage laborers or only hiring a few seasonal workers, a practice which is offset by the occasional sale of labor power by family household members to generate off-farm income. This occasional sale and purchase of labor power could simply be the monetized version of former reciprocity relations among farming neighbors, which may have previously involved some food and drinks for a day's labor, but no monetary payment as such. Self-exploiting household labor power makes these farms simple commodity producers but not capitalist farms. These farms sustain a scale of simple reproduction, which allows them to both replace their agricultural implements, including raw materials, and reproduce their labor power. The farm, however, does not produce a fund for accumulation, which could be the basis for hiring labor power or otherwise expanding the operation based on additional investments in machinery.

Transitional family farms constitute the third class stratum. These farms are in a transitional stage in the sense that they are producing in an unstable situation; they can either fall back into the subsistence farming situation or move up to the position of capitalist family farmer. In the latter case, the transitional farm will be producing beyond the needs for simple reproduction. What the farmer does with the surplus is critical in class terms; he or she can use the surplus product either to increase the standard of living and thus stay in a subsistence situation, but at a higher level, or use the surplus product to expand the operation and set the basis for capital accumulation. The latter situation leads to the fourth category of farming.

Capitalist farms, the fourth class category, generate enough product to go beyond simple reproduction and accumulate capital, i.e., to extend the wage labor-capital relationship. The surplus product is used to hire labor power beyond the family labor power to keep production going, turning it into a capitalist farm. Notice that capitalized farms must also invest in additional machinery as well to enhance their productivity levels and be competitive within the modern agricultural paradigm. Finally, corporate capitalist farms make up the final class of agricultural producers. The direct producers in this case are all hired wage laborers. Corporate farms, then, base their production on hired labor power and a high level of mechanization. One is no longer talking about family farms here, whether subsistence or transitional: capitalist and corporate

farms function on the basis of hired farm operators and workers, as well as on heavy investments in machinery, equipment, seeds, and other forms of agricultural technology.

From the five categories mentioned above, semi-proletarian farmers are clearly on the way out of farming. These are the farmers that have not been able to survive modern agriculture. It is just a matter of time before they become clearly incorporated into another class, whether working class or some position in the so-called middle classes, like professional wageworkers. The next two categories constitute the farming class proper, subsistence and transitional farmers. Although they occasionally rely on hiring wage labor, the main thrust of the farming operation continues to rely on family household labor to sustain it. The last two strata constitute the capitalist farming class in agriculture, capitalist farmers and corporate farms.

How are these class categories related to the USDA data? With regard to labor, infrasubsistence farms, subsistence farms, and transitional farms are roughly equivalent to small- and mid-sized farms, while the two types of capitalist farms would be those that are large or very large. However, in some cases, a farm might be larger in physical size or in economic class, yet employ less labor making the larger farm a mid-sized producer and the smaller farm a large producer. This labeling depends on the extent to which farms invest in machinery and equipment, or the "capital intensity" in conventional economics terms. An example of this type of small, but capital intensive farm would be in the case of greenhouse operations: the land size may be small but the capital intensity and number of hired wage laborers is high. If class boundaries are determined by economic class, acreage categories, or by other economic assets, these boundaries may shift at different times in history. That is to say, survival in the farming class, dropping out of farming, or becoming a capitalist farm may take different compositions of land and investments in other means of production and labor power.

In the quantitative exercise presented below, tables were designed to help illustrate the different strata within the Nebraska agrarian class structure, show changes that have occurred in the concentration of farms in each of the strata, indicate which farming class receives government support and at what levels, and identify which farming class has the most market share since the introduction of neoliberalism in agriculture. Starting in the late 1970's, a constant level of endowments was assumed while determining the various class boundaries.

Table 3.1 was derived from U.S. Agriculture Census data. It shows farm concentration within each class and gives the percentage of farms that occupy each stratum. Calculations from census data, historical factors, and empirical realities, such as farm incomes and expenses, were taken into account to determine the stratum breaks. Once the class stratum breaks were established, the percentage of farms falling into each sub-class was calculated for each time period. The calculations give a rough estimate of the percentage of farms in Nebraska that fall into each class. Although the actual percentage of farms in each class may vary slightly from the table, these percentages are very representative of agricultural producers in Nebraska and the Nebraska agrarian class structure.

Class/Yr	1977	1982	1987	1992	1997	2002	2007		
Capitalist Farms									
Corporate	4%	5 %	6%	7%	9%	7%	7%		
Family	14%	15%	15%	16%	17%	16%	14%		
Simple-Commodity Producing Family Farms									
Transitional	11%	18%	17%	21%	22%	19%	17%		
Subsistence	27%	26%	18%	16%	13%	12%	8%		
Infra-subsistence	63%	55%	59%	70%	65%	69%	76%		

Table 3.1: Percentage of Nebraska Farms in each Agrarian Sub-Class

Source: (USDA, 1978; 1982; 1987; 1992; 1997; 2002; 2007)

This table shows a clear pattern that has emerged in the agrarian class structure since 1978. The summed percentages of each sub-class in this table equal more than 100 percent because these numbers were calculated as an upper limit for each class because not all farms were mutually exclusive with regard to the variables used in the calculation. For example, the corporate capitalist farm sub-class was determined by farms with non-family corporate ownership and/or by farms that have a hired a manager running the operation. Capitalist farmers were calculated by the number of farms that hired at least one laborer for more than 150 days of the year. Transitional farms were derived by looking at sales class of farms, and depending on

the time period, different dollar amounts were used to establish the division line. Subsistence farms were considered farms with roughly \$50,000 to \$99,999 dollars in sales where the primary operator claimed farming as his or her occupation. Finally, infra-subsistance farms were determined by the farm's percentage of household income that was derived from off-farm activity, by the number of off-farm days worked by primary operator, and by the sales class of the farm.

Table 3.1 shows that the agrarian class structure in Nebraska has been polarizing toward both top and bottom strata, with the bottom strata increasing the most and middle farmers facing imminent disappearance. That is to say, since the 1970's, more farmers are becoming either capitalist or infra-subsistance producers, and at the same time, the transitional and subsistence classes are diminishing. The overall majority of farms are still simple-commodity producing farms, but instead of the majority of those farms being transitional and/or subsistance farms, the majority of producers are now infra-subsistence. This change signifies that a growing number of farms can no longer remain economically viable without off-farm income. Also, it highlights the fact that most Nebraska direct producers have basically passed the point where farming as a livelihood is no longer an option unless an operation is of a certain acreage or economic-sales class (in USDA terms). Subsistence farming is no longer an actual option, nor has it been since the late 1990's. Furthermore, the bulk of agricultural production has been concentrated in the hands of capitalist farmers with profits, rather than simple reproduction or subsistence, as the main driver of production. The exact enumeration of each agrarian sub-class is not the purpose of this thesis, and such work goes beyond the scope of this research. The main purpose for this class breakdown is to provide a rough percentage of farms that make up each stratum in the agrarian class structure, and to show how this structure has evolved over the years since the neoliberal turn in agriculture began.

In sum, the amount of labor power that comes from outside the family farm and the amount of income needed from off-farm sources for the subsistence of the family farm sets up the economic boundary between infra-subsistence or semi-proletarian farms and subsistence or sustainable family farms. Technological requirements are also paramount to staying competitive, or at least significant in order to remain economically viable in modern agriculture, and the classifications provided above give us a basis to determine which farms are at greater risk of not being able to survive modern agriculture, which farms stand a chance, and which farms are the technological drivers of the modern agricultural paradigm. It is possible that large and increasingly-large farm size somehow guarantees continued profitability and capital accumulation for capitalist (family and corporate) farms. If this is the case, it is more likely that these large farms are shielded by the production model itself and there may not be any type of challenge from those farmers to modern agriculture. This lack of resistance may indicate that large farms actually thrive within the current production system, and that these large farms are most likely the key social and economic agents.

After the percentage of farms in each sub-class was determined, the percentage of government subsidy funds received by each of the sub-classes was also calculated. These calculations indicate which sub-class of direct agricultural producer is more likely shielded by the agricultural production model through state funding, protection, and support. A clear pattern of inequitable subsidy distribution becomes apparent, and the social polarization trend is further enhanced. Once again, the percentage of government funds received by each sub-class varies depending on what criteria are used, but the next tables are representative of the Nebraska situation and the United States. Table 3.2 uses acreage or operation size to determine the class breaks. In the following tables, the first number represents the percentage of total government funds the class receives in a year, and the second number, which is in parenthesis, indicates the percentage of farms within that particular class in each given year.

Class/Yr	1977	1982	1987	1992	1997	2002	2007		
Capitalist Farms									
Corporate	NA	NA	15% (6)	22% (7)	20% (9)	30% (7)	31% (7)		
Family	NA	NA	60% (15)	57% (16)	51% (17)	45% (16)	47% (14)		
Simple-Commodity Producing Family Farms									
Transitional	NA	NA	20% (17)	14% (21)	13% (22)	11% (19)	10% (17)		
Subsistence	NA	NA	1% (18)	2% (16)	2% (13)	1% (12)	2% (8)		
Infra-subsistence	NA	NA	4% (59)	5% (70)	8% (65)	14% (69)	10% (76)		

 Table 3.2: Percentage of Government Subsidies Received by Nebraska Agrarian Classes by Acreage (% of Total Nebraska Farms)

Source: (USDA, 1978; 1982; 1987; 1992; 1997; 2002; 2007)

Government support heavily favors and encourages large producers while support for small- and mid-sized producers continues to dwindle. In table 3.3 below, class breaks are established by the value of total sales of an operation or the economic-sales class of the farm, and the number in parenthesis is again the percentage of farms in the class.

 Table 3.3: Percentage of Government Subsidies Received by Nebraska Agrarian Classes by Sales

 Class (% of Total Nebraska Farms)

Class/Yr	1977	1982	1987	1992	1997	2002	2007		
Capitalist Farms									
Corporate	NA	NA	20% (6)	34% (7)	43% (9)	46% (7)	25% (7)		
Family	NA	NA	37% (15)	35% (16)	29% (17)	26% (16)	48% (14)		
Simple-Commodity Producing Family Farms									
Transitional	NA	NA	23% (17)	16% (21)	11% (22)	10% (19)	10% (17)		
Subsistence	NA	NA	12% (18)	9% (16)	6% (13)	7% (12)	7% (8)		
Infra-subsistence	NA	NA	8% (59)	6% (70)	8% (65)	11% (69)	11% (76)		

Source: (USDA, 1978; 1982; 1987; 1992; 1997; 2002; 2007)

These tables show that, typically, over 70 percent of government subsidies go to capitalist farms. The majority of capitalist farms tend to be over 500 acres, and many of them over 1,000 acres in size, and capable of producing at least \$250,000 dollars of agricultural product per year. The federal and state government's support of large scale farms with subsidies make it almost impossible to fail at farming if an operation is of a certain minimum (but very large) size. No matter what the final production output, these large farms receive enough government support to continue production and perpetuate the modern agricultural paradigm.

The market share of each class is affected and has an effect on the class-structural process. Similar to the trends and patterns in subsidy distribution, concentration and control of the market is firmly with the capitalist farms. Table 3.4 uses acreage or operation size to determine the class breaks, and in the following tables, the first number represents the percentage of total sales by the class in that year, and the second number which is in parenthesis, indicates the percentage of farms within that particular class in each given year.

 Table 3.4: Percentage of Total Sales for Nebraska Agrarian Classes by Acreage (% of Total Nebraska Farms)

Class/Yr	1978	1982	1987	1992	1997	2002	2007			
Capitalist Farms	Capitalist Farms									
Corporate	18% (4)	21% (5)	20% (6)	23% (7)	27% (9)	30% (7)	36% (7)			
Family	22% (14)	22% (15)	21% (15)	24% (16)	23% (17)	23% (16)	24% (14)			
Simple-Commodity	Simple-Commodity Producing Family Farms									
Transitional	26% (12)	26% (18)	27% (17)	25% (21)	25% (22)	22% (19)	19% (17)			
Subsistence	24% (27)	22% (26)	19% (18)	17% (16)	14% (13)	13% (12)	11% (8)			
Infra-subsistence	10% (63)	9% (55)	13% (59)	11% (70)	11% (65)	12% (69)	10% (76)			

Source: (USDA, 1978; 1982; 1987; 1992; 1997; 2002; 2007)

In economic sales class size, the trend remains the same. In Table 3.5, class breaks are established by the value of total sales of an operation or the economic sales class of the farm (in USDA terms), and the number in parenthesis is still the percentage of farms for the class.

Class/Yr	1978	1982	1987	1992	1997	2002	2007		
Capitalist Farms									
Corporate	33% (4)	39% (5)	55% (6)	52% (7)	56% (9)	50% (7)	60% (7)		
Family	16% (14)	14% (15)	23% (15)	16% (16)	18% (17)	28% (16)	16% (14)		
Simple-Commodity Producing Family Farms									
Transitional	19% (12)	25% (18)	13% (17)	21% (21)	18% (22)	15% (19)	13% (17)		
Subsistence	23% (27)	17% (26)	6% (18)	8% (16)	6% (13)	4% (12)	9% (8)		
Infra-subsistence	9% (63)	5% (55)	3% (59)	3% (70)	8% (65)	3% (69)	2% (76)		

 Table 3.5: Percentage of Total Sales for Nebraska Agrarian Classes by Economic Sales Class (% of Total Nebraska Farms)

Source: (USDA, 1978; 1982; 1987; 1992; 1997; 2002; 2007)

Although the figures that were derived from the class stratification calculations represent the upper possible limits of concentration, government payments, and sales and not the actual exact numbers, these numbers show trends and patterns that have persisted since at least the early 1980s. These class distinctions also help identify direct agricultural producers who have an interest in contesting the modern agricultural paradigm. It should be said from the outset, however, that I do not see a direct causal link going from class position to political-cultural formation. As shown in later chapters, this process depends on how direct producers articulate rural struggles by the mediation of regional cultures, state intervention, and leadership types. For now, however, a description of the class-structural processes has been given, and through an examination of the historical development of U.S. agriculture, the associated social consequences of modern agricultural production, and the current situation direct agricultural producers in Nebraska are facing, the context for the political-cultural formation of the Nebraska agrarian class will be established. The history of U.S. agriculture is explained in the next section and it links the historical development of U.S. agriculture to the contemporary class-structural issues discussed in this section.

Historical Background

The face of the rural United States has undergone many dramatic changes since the 1930's and the advent of modern agriculture. Over the next 80 years it would see technological, mechanical, biological, and commercial revolutions, as well as experience changes in government policy regarding agricultural producers and see changes in the type and strength of rural- and agriculturally-based organizations. These changes have had a profound effect on the structure of U.S. agriculture, agricultural producers, and rural communities and populations. Although many differences exist in agriculture with regard to farm size, type of operation, farming practices, and crops produced due to differences in regional ecology, identity, and culture, this section provides a structural and historical overview of U.S. agriculture, identifies its production model, and explains the modern agricultural paradigm.

Agrarianism and U.S. Agriculture: 1776-1930's

Since the establishment of the United States as an independent nation state, the role and place of agriculture has been debated, and this debate has usually been driven by the idea of agrarianism. The concept, definition, and interpretation of agrarianism has changed over the centuries, and it has been used at different times and by different organizations to promote the idealized character of farming as an activity and to understand the appropriate place of farming as an economic, political, and cultural activity within American society (Dixon & Hapke, 2003: 144-145). Initially defined in terms by Thomas Jefferson's conception of agrarianism, U.S. agriculture was originally based on the belief of the virtue and independence of the yeoman farmer, the concept of the natural right to private property, land ownership without any restrictions, the use of land to promote social justice in the city, and on the idea that with hard work, anyone could succeed in farming. For Jefferson, independent, land-owning farmers were necessary elements for the establishment and maintenance of a democratic society, and this belief stands as the basis for Americans' collective ideological framework of U.S. agriculture (Fink, 1992; Danbom, 1995; Hurt, 2002a; Dixon & Hapke, 2003). By 1862, these beliefs helped define the place, role, and future for the development of U.S. agriculture, and these beliefs were also the force behind the passage of new, agriculturally-focused legislation.

The Homestead Act of 1862 was the first piece of agrarianist legislation. Enacted during the Civil War, this legislation threatened the interests of export-oriented capitalist agriculture based on the monoculture plantation model and slave labor in the South (Kloppenburg, 2004: 57-61). This act was popular and supported by both urban workers in the Northeast and by political groups such as the National Reform Movement. These individuals and organizations felt that the opportunity and availability of free land would help balance out the exploitation of labor in the cities. Although the Homestead Act did provide opportunity for some individuals, it also provided big business, corporate interests, and land speculators with the chance to further immerse themselves into the agricultural sector and to become more economically powerful and politically influential. The same year also saw the passage of the Morrill Act which established land grant colleges and universities for the advancement of agricultural and mechanical research, the Pacific Railroad Act which funded the construction of the railroad from Iowa to California for better access to markets for agricultural products, and the establishment of the United States Department of Agriculture (USDA). Even though these acts and departments showed congressional support for independent, land-owning farmer households, they also promoted a new form of commercial agrarianism (Dixon & Hapke, 2003: 143-146). These actions by the government helped develop and establish a dynamic, rapidly expanding, increasingly commercial, scientifically-based, technologically-complex form of agricultural production. This type of production would drive U.S. agriculture in the future and would come to dominate U.S. agriculture in the twenty-first century (Danbom, 1995: 145). During this same time period, strong support for the family farm began to emerge that presented the family farm not only as an economically viable unit, but also as the center and base of U.S. society.

During this period, industrialization and urbanization in both the United States and Europe also had an effect on U.S. agriculture and helped it expand until the end of the nineteenth century. This rapid expansion sparked debates about the need for government intervention in the agricultural sector to help protect farmers from the volatility of markets and from the control of merchants, railroads, land speculators, and loan brokers entering the sector (Morgan, 1979). From 1870-1900, many popular agrarian, rural, and agriculture-based organizations began to emerge, such as the Patrons of Husbandry, the Farmers Alliance, and the Populist Party. These organizations all called for economic reforms aimed at protecting farmers from big business and corporate interests, on the claim that farmers were the most virtuous and worthy members of

society. The popular support base of these organizations was found in small- and mid-sized family farmers who believed that farming was more than just business. For these producers, farming was a cultural issue as well as a way of life (Fink, 1992: 23; Dixon & Hapke, 2003: 145).

The early 1900's set the stage for what was to come in U.S. agriculture over the next century and beyond, and during this time period the framework for the U.S. agricultural model was established. The split between family farmers who saw their way of life being threatened and big business that was further integrating into the agricultural sector solely for profit was extended and grew deeper. Small- and mid-sized farmers influenced by the Populist Movement of the late 1800's pushed for government intervention to help with the economic difficulties associated with farming, while business and conservative interests pushed for a more laissez-faire approach by the government and for the development of a better business-oriented farmer (Danbom, 1995: 160; Dixon & Hapke, 2003: 146). At the same time, the U.S. government began to integrate the agricultural sector into national economic policy, and increased agricultural productivity was seen as a way to facilitate urban industrialization and increase national wealth.

In the United States, numerous changes occurred in agriculture from 1900-1920, and those changes were accompanied by great prosperity that U.S. farmers had not seen since the 1870's. Industrialization in the United States and Europe, a rapidly increasing domestic population, and food demands caused by World War I helped farmers and rural communities experience unparalleled growth and wealth. New technology, machinery, and in-field practices were introduced and disseminated by the land-grant universities, and new legislation elevated the level of the federal government's involvement and the role of the USDA in agriculture to an all-time high. Rural- and agriculture-based organizations also increased in size and numbers as they became more organized, unified, and specific with their interests and demands. Farmer cooperatives were created behind specific commodities in the form of grain elevators, shipping associations, and warehouse storage, and these co-ops became the most common form of organization among agricultural direct producers in the first decades of the century. The American Society of Equity and the Farmers Union also grew in membership and influence during this period, and the Nebraska Farmers Union was established in 1913. Cooperatives and farm associations like these pushed for new farm legislation, easier access to credit, lower

transportation rates for commodities, improved rural infrastructure, fair prices for their goods, and for the overall expansion and involvement of the federal government in agriculture in order to economically and socially protect and regulate agrarian life. Despite their many differences, farmers had enough unity, collective purpose, and organization to achieve positive state intervention and force political action that would help create a more producer-friendly, regulatory state by the early 1920's (Cochrane, 1979; Danbom, 1995; Gardner, 2002; Hurt, 2002a; 2002b; Dixon & Hapke, 2003).

By 1920, the United States had the highest yielding, best quality, and most desired agricultural products in the world, and close to 32 million Americans were involved in agricultural production on 6.4 million farms nationwide (Hurt, 2002b). The first two decades of the twentieth century, also known as the 'Golden Age' of farming, were the most prosperous time that U.S. farmers had ever experienced; however, the following decade would not be as accommodating. After World War I, commodity prices dropped and stayed low until the mid-1930's. The Stock Market Crash of 1929 only worsened the problem, and hundreds of thousands of families and farmers were pushed off their land, and the U.S. agricultural sector experienced a major structural transformation that still persists today; that is, a dual model of agriculture with the majority of farmers being poor and the minority of farmers rich (Dixon & Hapke, 2003: 146).

The establishment of the first food regime, as well as major changes in agricultural production and food processing, also took place during this time. In the United States, an agro-food complex began to emerge in the late nineteenth century and would come to form the basis of U.S. agricultural hegemony in the second food regime of the following decades until the age of neoliberalism (Friedmann & McMichael, 1989: 141; McMichael, 2009: 94). Grain exports and food aid form the United States, coupled with the transition of agriculture into an industrial sector, helped develop a new type of export-oriented, commercial agriculture that would be the foundation of the new, independently governed, state-centered national economies that were emerging from the new settler-states and other former British colonies (Friedmann & McMichael, 1989: 93-96). As capitalist accumulation expanded, the trajectory of U.S. agricultural development was set and the foundations of the modern agricultural paradigm were laid.

The United States led the process of transnational capital accumulation from 1870-1914 which changed as international trade overtook the old system of colonial specialization in agriculture. Commodity production based on the family farm, mechanized harvesters, specialized commodity production, and pastoral estates aided by steamships and the railroad, led to the expansion of U.S. agricultural hegemony and the establishment of the first distinct international trade system (Friedmann, 1978: 547-551). This new system was based on the exchange of agricultural products for capital goods, and a new international division of labor replaced the old colonial division of labor. A new world economy emerged that now linked capital goods and wage labor regions of Europe to agricultural commodity production by family labor in the settler-states, all within a price regulated world market (Friedmann & McMichael, 1989: 100-101).

The new agricultural production model that was developed at the end of the century would be the basis of the second food regime's relation to industrial agriculture and food production in the decades to come, after a transitional stage between the two world wars. World agriculture and its increasing ties to industry were based on comparative advantage, the replacement of labor with industrial inputs, and the expanding commercial sector (Friedmann & McMichael, 1989: 102-103). The integration of food and input markets, as well as the transportation of food over long distances, only helped to begin a pattern of unsustainable development, strengthen the relationship between agriculture and industry, and reinforce the U.S. agricultural production model which is the core of the modern agricultural paradigm.

As the U.S. agricultural sector underwent many changes during the first few decades of the twentieth century, the U.S. modern agricultural production model began to emerge. The United States experienced changes in almost every aspect of agricultural production as advances in technology and machinery, changes in government agricultural policy, and the introduction of new, in-field farming practices brought U.S. agricultural production to an all time high and helped extend U. S. hegemonic influence on world agriculture. The U.S. agricultural production model began to take shape from 1900-1930 and, although it is almost unrecognizable today, the biggest changes of that time laid the foundation for what was to come over the next century as the modern agricultural paradigm. The start of a new, scientific age in farming had begun that was composed of three essential parts: the discovery of new scientific relationships, the

development of new technologies based on those relationships, and the adoption of technologies in agriculture. The technology and science that would spark the Green Revolution was also developed during this time and the eventual results would solidify and reinforce public belief in the benefits of technology in agriculture. Even though the development and implementation of these technologies was seen only to a small extent at the time, these factors would eventually come to dominate U.S. agriculture for the rest of the twentieth century (Cochrane, 1979: 101).

Modern Agriculture and Social Differentiation: 1930's-1980's

Hard times and a mass exodus from the countryside prompted the U.S. Federal Government to actively intervene in the market in 1933, and a comprehensive agricultural policy was created and introduced. The crux of the matter was that modern agricultural technologies had contributed to the creation of overproduction. This, in turn, led to collapsing farm prices and massive farmer bankruptcies. New-Deal policies tried to soften this process for farmers. Over the next decade, different types of New Deal agricultural policies were enacted in an attempt to increase farm prices by limiting supply and production. The Federal Government made direct payments to producers of the seven main commodities in exchange for a reduction in acres put into production. The effectiveness of New Deal agricultural policy in reducing surplus is hard to determine, and it is possible that the droughts of the 1930's did more to limit production than government programs (Cochrane, 1979: 287). Although New Deal policies did have some success in alleviating economic and ecological burdens for farmers, the number of farms decreased, and over five hundred thousand people left the Great Plains during this time period (Hurt, 2002a; 2002b). In general, the agricultural programs and policies of the 1930's included direct payments to farmers for reductions in commodity production, price supports, and loans for conservation efforts. These programs, however, favored the largest producers who could afford to put land aside and remain idle. Government payments became the main source of income for many farm families. The most significant thing about this period was the massive intervention by the Federal Government, which substantially changed the relationship between direct producers and the state. These changes established the foundation for all farm programs in the future, and they marked a new era of state intervention in U.S. agriculture that still endures into the twentyfirst century (Hurt, 2002a; 2002b; Dixon & Hapke, 2003).

Entry into World War II solved the problem of overproduction and low prices and U.S. farmers experienced prosperity once again. The war years had a major effect on the agricultural sector and dramatically helped bring about the industrialization of agriculture. With an increase in profits from strong domestic and international markets and the loss of almost five million people from farms during the war, the use and application of agricultural technology expanded significantly. Although the integrated technology had been developed decades earlier, the use of tractors, combines, hybrid seeds, fertilizers, pesticides, insecticides, and irrigation all increased greatly and agricultural productivity rose again. The adaptation and implementation of subsistence family farming as the economically viable norm and ushered in the beginning of industrial farming and the corporate takeover of agriculture (Hurt, 2002b). Industrial inputs increased the need for capital and land, and thus gave large land-holding producers the advantage and forced more and more small- and medium-sized farmers off the land.

After World War II, demand for agricultural commodities fell again and pressure from urban consumers and agribusiness for low-cost food and high-production agriculture rose. A decrease in rural population, the lack of solidarity among agricultural direct producers, and the lack of coordination between rural- and agriculture-based organizations allowed the U.S. government to ignore the farm vote. Large corporate farmers, usually represented by the Farm Bureau, pushed for a reduced role in agriculture by the government and for a move towards a more laissez-faire, free-market economy. This push for a free-market economy, coupled with the emergence of a new technology regime and the rise of agribusiness interests, forced more and more small- and mid-sized producers out of agriculture and off the countryside. Between 1950 and 1969, the number of farms in the United States was cut in half from around 5.4 million to about 2.7 million; the average size of farms increased dramatically from 216 acres to 389 acres, and the number of large farm operations (farms over 1,000 acres) almost doubled from just over 12,000 acres to over 20,000 acres (USDA, 1982; Stanton, 1993: 50).

The 1950's are associated with the rise of the second food regime. This food regime ushered in changes in food production, consumption relations, and in the world food economy. Surplus food from the United States was sent to Third World countries, which were now part of its informal, postcolonial empire, and U.S. hegemony expanded with the use of food aid, which

was used to encourage selective industrialization and to reinforce loyalty against communism from developing countries. Green-Revolution technologies were used for national agroindustrialization, market relations were extended, and linkages between farm sectors were elaborated through global commodity and supply chains. Subsidized agricultural commodities oriented for export were used by the United States to structure international trade with production relations in its favor, and national focus shifted from rural development to commodity programs. United States influence and power affected international agricultural development as well. Internationally, agricultural production shifted focus from national production geared towards domestic markets to export-oriented specialized agricultural production, and these changes would have international implications in the future for these countries with regard to food dependency and food sovereignty (Friedmann & McMichael, 1989; McMichael, 2009).

By the 1960's, technological advancements in agriculture made reducing agricultural overproduction all but impossible. New congressional districts created in 1964 dramatically changed farmers' political representation and influence and, by the 1970's, new agricultural legislation was only discussed every four years (Hurt, 2002a; 2002b). U.S. agricultural markets also shifted in the 1970's and U.S. agricultural products were now increasingly being produced for an export-oriented world market. The U.S. government also started using its position in the global grain trade for leverage in establishing trade policies and as a bilateral bargaining chip along with U.S. food aid (Cochrane, 1979: 150-151). Unstable world grain markets in the 1970's contributed to more U.S. farmers leaving the agricultural sector and the countryside, and food dependency on the United States by international trade partners continued to grow. The 1970's also gave birth to rural- and agriculture-based organizations that were emerging from civil society as President Richard Nixon dismantled many of the social programs set up in the 1960's. During this time, both the Center for Rural Affairs and the Nebraska Sustainable Agriculture Society were established, and the first wave of resistance to industrial agriculture was getting started by activists who were involved with some of the social movements of the 1960's. These activists began to organize around environmental issues, anti-nuclear sentiment, women's rights, and local and neighborhood development projects (McAdam, 1988).

Between the end of World War II and the beginning of the 1980's, technology and mechanization became inseparable from U.S. agriculture. Tractors, combines, and trucks became

the most common tools for farmers, and the use of fertilizers, pesticides, and herbicides was seen as necessary, productive, and safe. The cost of and reliance on these new farm inputs put producers into a price-cost squeeze, and when the price of the commodities did not cover the cost of the inputs, farmers went further into debt, and many small- and mid-sized producers had no choice but to abandon farming all together. By 1980, farming was almost completely specialized, commercialized, and capitalized. Small producers had steadily been moved or forced out of agriculture during the 1960's and 1970's, causing the average farm size in the United States to increase and helping the largest producers consolidate their market power. Large agribusinesses and other corporate interests started to dominate the agricultural sector, in both its inputs producing side and its processing and distribution side, and the role of science and technology in agriculture continued to expand. By the 1980's, the foundations of the modern agricultural paradigm were well established and this paradigm would continue to be strengthened and reinforced throughout the following decades, namely through biotechnology (Otero, 2012).

Rise of the Neoliberal Food Regime: 1980's-Present

An obvious and important change in the relationship between agricultural producers and the state occurred in the early 1980's, and it involved the move from a producer-friendly, regulatory state to a neoliberal state. Neoliberalism in this context denotes a national policy, or rather, reform of the then-existing policy, of state-led development justified by the neoclassic theory of economic growth and development and an ideology of globalization (Petras & Veltmeyer, 2010: 71). In practice, neoliberalism is an economic doctrine based on the ideology of the free market and the belief that the market freed from government interference is the most efficient mechanism for allocating resources across the system and for ensuring that each factor of production receives an economic return commensurate to its contribution. When applied to agriculture, the neoliberal model translates to agricultural practices and policies based on the ideology of the free market and on the alliance between major capitalist farmers and ranchers and transnational agribusiness corporations that control the international commodity trade, the seed trade, pesticide production, and agro-industry. This neoliberal model for agriculture gives priority to large holdings that extensively use agrochemicals and concentrate production on monocultures of commodity crops for export. This model is said to promote higher labor productivity and efficiency, but it also contributes to large producers driving small- and mid-sized producers off the land (Storey, 2001; Pritchard, 2005b).

The policy prescriptions for neoliberalism include balancing national payments and fiscal accounts and controlling inflation; reduction of government interference in the market; privatization of state enterprises and of the means of production; deregulation of capital, product, and labor markets; liberalized trade and movement of investment capital; and a democratized state-civil society relation and a decentralized government. Together, neoliberalism and globalization constitute the fundamental policy dynamics of capitalist development in the 1980's and the 1990's providing for development and a facilitating environment and institutional framework. This change of national policy had a tremendous effect on U.S. farmers and rural communities, as well as on the modern agricultural production model and paradigm (Foladori & Wise, 2009: 111-112). One of the major aspects of neoliberal reorganization involves the agricultural sector, biotechnology, and the subsequent neoregulation designed to protect corporate interests. All of these aspects are also characteristic of a newly emerging, third food regime. Central to this neoliberal food regime are biotechnologies which enhance and support the current agricultural production model and state enforced neoregulation that has been established through a series of international agreements and national legislation designed to protect agribusiness transnational corporations and promote the neoliberal agenda (Otero, 2012).

By the mid-1990's, agricultural biotechnology and genetically engineered (GE) crops became commercialized, and since the inception of this new technology, the United States has been the leader in its development and adoption. The United States is also the top producer of GE crops, accounting for over 50 percent of the global GE crop production with more than seven different types of crops being grown (Pechlaner & Otero, 2008: 356-358). Most of the GE crops being produced have two major traits: herbicide tolerance (HT) and insect resistance (IR), or a combination of the two. Although HT and IR characteristics are most common, freeze-resistant crops and terminating seed crops have also been produced (Pechlaner & Otero, 2008: 353-358). The United States has a huge vested interest in agricultural biotechnologies and GE crops. As of the early twenty-first century, 75 percent of all publically-traded biotechnology companies were U.S. based, and the United States far outspent all other countries in biotechnology research and development each year (Pechlaner & Otero, 2008: 356). Because of the high level of investment and involvement in agricultural biotechnology, the United States as a nation and U.S. firms have a large economic stake in the industry and act to protect that stake. In order to protect their interests, investments, and dominance in the field, new legal and regulatory frameworks have been established on both the national and supranational levels. This neoregulation is based on intellectual property rights (IPR) that protect and reward the developers of new biotechnology, a regulatory body that oversees GE crops, and on facilitating the predominance of transnational agribusiness corporations.

The U.S. push to capture the biotechnology market has spurred a neoregulatory approach that is both pro-private sector and pro-IPR protection. The United States was very vocal in the establishment and implementation of global IPR protection through the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement overseen by the World Trade Organization (WTO), which established a minimum level of IPR protection for all its members. The United States not only supports IRP agreements, but it also supports a globally homogenous system of IPR protection as well (Pechlaner & Otero, 2010: 12). Much of the success of the U.S. agricultural sector can be attributed to high subsidies and to the highly favorable international trade policies and regulations that protect it. Additionally, the U.S. agricultural biotechnology sector has been successful with the TRIPS agreement in securing worldwide patent protection. Under the TRIPS agreement, the United States has adopted the most stringent IPR protection available, and on the national level, strong IPR protections have led to patents on seeds, drastically changing the legality of traditional seed-saving procedures. Now, in the United States where patented agricultural biotechnology has been applied, farmers can no longer reuse their own seed and they must repurchase new crop seed each year (Pechlaner & Otero, 2008: 357).

The U.S.'s strong stance on IPR, coupled with the lack of adequate regulation of agriculture biotechnologies, has led to the industry's rapid growth. The quick adoption, strong intellectual property rights, and weak regulatory oversight of agricultural biotechnology in the United States have had the desired effect for U.S. biotechnology firms. Since agricultural biotechnology is one of the fastest adopted agricultural technologies, the United States has a significant share of the global adoption profits (Pechlaner & Otero, 2008: 358). There have been some challenges to the agricultural biotechnology industry by farmers in the United States,

mostly in the legal forum over IPR, seed-saving, and contamination issues; however, organized, mass resistance on a popular front against GE crops and agricultural biotechnology in the United States does not exist.

With a move towards GE crops and a more mechanized form of agriculture that is herbicide, pesticide, petroleum, and water intensive, the input costs associated with farming and agricultural production have risen, and pests, fungi, bacteria, and weeds are all becoming more chemical resistant. The U.S. agricultural production model makes survival for small- and midsized producers difficult. Farmers need to make enough money to sustain their farming operations, support their families, and not be taken over by large industrial, corporate farms or lose their farms to the bank in foreclosure. In order to survive, farmers must face many challenges, challenges that are directly related to the social aspects of rural communities as well as ecological issues. Production decisions and farming methods ultimately determine the type of agricultural production practices used. Conforming to the modern agricultural paradigm means following the trend that consists of highly mechanized, large-scale farming operations specializing in mono-crop production that is high in herbicide, pesticide, and petroleum usage. These methods further separate the producer from the land, inevitably contributing to environmental stress. In order to survive economically, small- and mid-sized producers are losing the freedom to choose what and how they produce, as they are further integrated and pulled deeper into the modern agricultural paradigm (Gonzalez, 2004). To some degree, even the most capitalized corporate farms are now 'working for Monsanto,' so to speak, meaning that they can hardly retain or expand their profitability because of mounting costs and diminishing returns from their purchased inputs, and subsequently, they are in fact becoming a sort of contract farmer who has been 'subsumed' under the capital of transnational agribusiness. If this is the case, the basis for resistance against the modern agricultural paradigm could include farmers and producers of all types because all producers are dealing with the same consequences of modern agriculture, either directly or indirectly.

Social Consequences

The modern agricultural paradigm played a major part in U.S. development and has been efficient in producing surplus commodity grains. Unfortunately, this productivity has a cost, and social issues and ecological concerns have surfaced as the result of capitalist agriculture and the U.S. production model. Capitalism in its neoliberal stage is associated with several forms of crises: economic crisis, which is not new; plus energy crisis, financial crisis and most importantly in this case, the food crisis. The global food crisis that began in late 2007 and lasted until at least 2008 is the clearest example and manifestation of the negative effects of modern industrial agriculture. The crisis helped swell the ranks of the hungry in the world to over one billion in 2009, despite record harvests and grain surpluses (Holt-Gimenez & Patel, 2009: 6-7).

Transnational agribusiness corporations, international banking and financial institutions, and a handful of national governments have helped turn agriculture and food production into a mode of corporate accumulation that has led to vulnerable food systems, environmental degradation, and forced migration of workers (Bello, 2009; Rosset, 2009b). Hunger and food vulnerability affect more people and communities than ever before, while corporate agribusiness profits continue to grow. There are over 35 million food insecure people living in the United States alone, and many of those facing food insecurity are the people producing the food crops (Holt-Gimenez & Patel, 2009: 7-8). A combination of speculation in commodity markets, the displacement of food crops for fuel crops, food dumping by developed nations, structural adjustment programs, oil dependency and price fluctuation, increased meat consumption, and climate change, have all contributed to the food crisis. Those factors, along with the highly controlled and consolidated market power of transnational agribusiness monopolies, have led to the destruction of local and national food systems and producer polarization. International trade agreements that favor developed countries, protective tariffs, and high subsidies have helped these corporations profit at the expense of the worker and consumer health. The food crisis and the increased food vulnerability highlight the inequalities and weakness of the current industrial agricultural model and global food system that have displaced millions of small farmers and left close to one sixth of the world's population hungry (Bello, 2009; Holt-Gimenez & Patel, 2009).

Demographic trends related to modern agricultural production have social implications as well. The government support of large-scale corporate farming helps to destabilize rural communities by minimizing the number of producers in the countryside, which leads to production polarization. The largest five percent of producers' market share was over 54 percent in 1987 and it continues to grow. In 1997, small farms made up almost 75 percent of total U.S. farms but only accounted for seven percent of total sales, and the top three percent of producers made up over half of total sales (Labao & Meyer, 2001: 106-109). With a decrease in population, services, and the tax base, the stability of rural communities begins to erode. The U.S. policy of cheap domestic food and export-oriented agriculture forces farmers to increase operation size and intensity in order to survive. Operations that cannot grow in size and compete are forced to find other income sources. By the turn of the twenty-first century, almost 90 percent of smallfarm income came from a non-farm source, and farms that produce less than \$250,000 dollars (94 percent of U.S. farms) cannot adequately support a family (Labao & Meyer, 2001: 109). Those farms that cannot find outside income sources fail, and the population declines even more. In addition to water and energy overuse, large operations must hire wage-labor. The hiring of cheap labor in some agricultural sectors is used in order to cut production costs. This practice usually means the hiring of migrant labor that is neither paid properly nor integrated into the community, adding to the further unraveling of the social fabric.

Rural populations continue to decline and rural communities are disappearing all across the United States. In turn, the rural tax base is declining and these rural communities are losing amenities and services. Rural flight, less access to healthcare, the consolidation of school districts, and the loss of local clubs and organizations is occurring in virtually all rural communities across the United States. As fewer and fewer small- and mid-sized producers remain, there is a further separation between producer and land. In corporate industrial farming, land is no longer seen as a family farm or ranch that will provide a place to live and a livelihood for the next generation. Land is only seen as an asset or as capital to be used for extracting maximum profits without any regard for future generations. As producers become less attached to the land, more social and ecological problems occur for the communities and people that remain (Castle, 1998; Labao & Meyer, 2001).

Nebraska Situation

Compared to the rest of the United States, Nebraska is a sparsely populated state and the average Nebraska farm size is more than twice the national average. In 2009, Nebraska, as a whole, was comparable to the U.S. national average in per capita income, percent of high school graduates, and individuals with a college education, and the poverty rate and level of food insecurity in the state were lower than the national average (USDA, 2012c). Nebraska ranked first nationally in red meat, great northern beans, and popcorn production in 2011; and from 2006-2010, the average farm income in the state was over \$68,000 dollars per farm. In 2009, Nebraska farms had over \$14 billion dollars in agricultural production expenses with close to \$3 billion dollars spent in seed and feed costs, \$3.5 billion dollars in taxes, rent, interest, and equipment depreciation (USDA, 2012d). By the numbers, it would seem that most rural Nebraskans are truly living the state slogan and that Nebraska farmers really are living 'the good life.' These numbers, however, are slightly deceiving and they do not tell the whole story, nor do they paint an accurate picture when it comes to rural Nebraska, its people, or the rural- and agriculturally-based organizations working from within the state.

Nebraska exists in the advanced capitalist society of the United States and is one of the leading states in the nation in agricultural production. Politically, the state has historically been a conservative Republican stronghold. The last time Nebraska voted for a Democratic candidate in a presidential election was in 1964. In fact, the state has only voted for the Democratic candidate seven times since it became a state in 1867. Today, there are more than 1.8 million people living in the state, and over 20 percent of the population is employed in agriculture or agriculture-related jobs (USDA, 2010). In 2010, Nebraska agriculture contributed over \$17 billion dollars to the state economy, and Nebraska agriculture accounted for 5.5 percent of the U.S. total economy (USDA, 2012b). Each dollar from Nebraska agricultural exports generates an additional one dollar and thirty-one cents in economic activity in the state, and Nebraska exports were \$5.3 billion dollars in 2010, with soybean and soybean products, feed grain, and live animals and meat as the top three agricultural exports (USDA, 2011; USDA, 2012c; USDA, 2012b). In 2010, 93 percent of the state, over 45.6 million acres, was dedicated to agricultural use by the 47,200 farm and ranch operations in the state which have an average size of 966 acres (USDA, 2012a).

Average farm size has slowly increased since the 1980's and the number of farms has dropped. Corn production has dramatically increased in the state and 40 percent of the 2008 corn crop went into bio-fuel production.

Adhering to the U.S. agricultural production model puts stress on producers, rural communities, and the environment, and many Nebraska farmers and rural communities have been affected by the neoliberal influence on capitalist agriculture in the United States. Dwindling populations and economic decline, along with ecological problems and resource depletion have taken their toll on many rural communities. Nebraska is mostly a white, middle-class state, and many residents have Czech, Irish, Danish, German, and Swedish ancestry. The state has an educated population, with close to 90 percent of the people completing high school and almost 28 percent finishing college. Despite an educated population, Nebraska still has a 12.6 percent poverty rate and a 4.7 percent unemployment rate with 17.9 percent of all households experiencing some degree of food insecurity (USDA, 2012c). Close to 85 percent of Nebraska farms are individually or family owned, and the largest number of farms is small- and mid-sized operations. Large and very large farms are fewest in number, but account for close to 65 percent of total agriculturally related income. Those large and very large farms also receive the most money in government subsidies and credit. Nebraska is also home to many nationally and internationally recognized agribusiness firms, food production, meat processing, commodity trading, and commodity transportation. Access to markets and freedom to decide whether or not to participate in those markets is very limited. Nebraska is headquarters for many corporations at both ends of various commodity chains, and numerous large branch sites of almost every top food producer, commodity trader, and agricultural input supplier are located in the state.

Many of the problems facing Nebraska are the same as those that threaten the rest of the rural United States, but Nebraska finds itself in a unique position because of the introduction of the bio-fuel industry in combination with corn and livestock production. What makes this situation unique is that Nebraska relies on deep-well irrigation for this kind of agricultural production. Nebraska is located above the second largest aquifer in the world, and water rights and water usage issues are already important points of discussion in rural development and agricultural production. Nebraska finds itself in a precarious position with regard to the bio-fuel industry. Nebraska has begun a cycle of production that is not socially or ecologically

sustainable. Fueled by government policies and subsidies that encourage bio-fuel production, Nebraska farming has shifted towards production for this industry. For example, in the U.S., corn grown for fuel has one dollar and forty-three cents per bushel added value due to tax credits and subsidies, and this policy has resulted in a rise in the price of corn and added to the trend of farmers shifting land away from food crop production to bio-fuel production (Senauer, 2008: 1229). In Nebraska this increased price for corn has meant more land devoted to water-intense corn production. Nebraska's climate is not the most ideal for corn production because of the semi-arid climate and, therefore, the amount of ground and surface water needed for irrigation has increased. Not only has this increase in irrigation depleted the water table, but also Nebraska has already been sued by Kansas and other states over water rights issues in the Republican River Valley. Nebraska is currently ranked first in the nation for irrigated cropland and third in corn production (USDA, 2010), but this trend is not ecologically sustainable for Nebraska.

To compound the water issues, bio-fuel production is a very water-intense process, taking over two gallons of water to produce one gallon of bio-fuel. Nebraska ranked second in the nation for ethanol production capacity, and 40 percent of the state's corn crop went to ethanol production in 2008 (USDA, 2010). This move toward bio-fuel production seems very contradictory in Nebraska because ethanol production is not ecologically sustainable, yet the reason behind the production of bio-fuels is energy independence and environmental protection. Overall, the bio-fuel project represents a politically-orchestrated attempt to address the energy and climate crisis, but with methods geared towards sustaining capital profitability which is fundamentally at odds with social and ecological sustainability. Additionally, the bio-fuel project adds to the food crisis and deepens the metabolic rift even further separating agriculture from its biological base (McMichael, 2008: 2; 5).

In Nebraska, the consequences and trends of the modern agricultural paradigm are apparent, and the Nebraska farmer is now put in a difficult position trying to balance economic viability with ecological and social concerns. Rural populations continue to shrink, along with the overall number of farms. Most large capitalist operations have complied with the current trend of larger-scale operations that are heavily mechanized and petro-oriented. Government subsidies supporting corporate and large-scale producers encourage farming operations to grow in size in order to compete and protect their investments and their slim profit margins. Farm expenses for fuel and chemicals increase each year, as do the number of irrigated acres and acres applied with chemicals, fertilizers, pesticides, and herbicides. Government payments continue to disproportionally reward and favor a small percentage of large producers who produce animal feed, and/or bio-fuel fodder for domestic and foreign markets. The water table is being depleted and subsidies and government supports continue to encourage water- and chemical-intense crop production under the modern agricultural paradigm rhetoric of energy independence and feeding the world. These issues all affect how individuals and communities respond to the U.S. agricultural production model. Ultimately, the degree of successful integration or resistance to the model depends on an organized collective response by society.

Nebraska producers have grown accustomed to the pressure to expand farm operations and produce more in order to stay economically viable. State and federal policies encourage producers to buy more, spend more, produce more, export more, and expand more. Government incentives and subsidies encourage production for export-oriented markets, production on marginal land, and the use of chemicals for pesticides, herbicides, and fertilizers. The 'technological fix' like using GMO or GE crops for increased outputs is also characteristic of Nebraska agriculture. The move by the United States to 'go green' and become energy independent has encouraged Nebraska farmers to produce more corn, and tax breaks and government subsidies have spurred the ethanol industry in the state. Under the guise of being more energy efficient and more eco-friendly, ethanol production has increased, and the state is now ranked second nationally in production capacity. Corn, one of the state's top commodities, is now mainly produced for cattle feed and ethanol production, with close to 80 percent of all Nebraska corn going towards their production (USDA, 2012a). Subsidies for corn and tax incentives for bio-fuel production are forcing more and more small- and mid-sized producers to expand or shift production strategies in order to qualify for available support; these farmers are forced out of agricultural production if they are unable to increase production enough. Subsides for corn and other agricultural products from 1995-2010 equaled over \$14.5 billion dollars (Environmental Work Group [EWG], 2011), with 63 percent of the \$8.7 billion dollars in corn subsidies going to the top ten percent of subsidy recipients.

The distribution of these subsidies completely favors large, commercial agriculture operations, and these government incentives make it next to impossible to fail if the operation is

big enough. The economic-structural process has put many producers in a position with no real choice but to follow the neoliberal model and continue with business as usual in order to stay afloat. The neoliberal production model not only is keeping some producers afloat, but it is actually helping some producers succeed and get rich without selling a single kernel of grain, if they were inclined to do so. Hypothetically, if a producer is large enough, he or she could use nothing more than government subsidies and payments to reinvest and buy land. Some of these large operations are investing money in land purchases because such a strategy helps in keeping them from showing too much of a profit at the end of the year, also allowing them to take advantage of other tax breaks and government incentives. These large producers pay over market value, sometimes as much as three times the market value (Meter, 2010) on land, thereby causing land values and evaluations to be falsely inflated (Duffy, 2011).

These inflated prices on land cause tax evaluations to rise in the rest of the county, and small- and mid-sized producers are forced to pay more in taxes than the piece of land they own is even worth, and sometimes taxes coupled with high input expenses are more than the land has ever, or will ever produce, even at its highest yield levels. These small- and mid-sized producers are then forced to sell because they are unable to compete, produce, or finance their operations while large farm operations continue to grow and force more farmers out once again, all without ever even having to produce a single crop. This discussion of the modern agricultural paradigm and U.S. state policies has helped develop the context and define the role and image of the U.S. farmer, while helping to describe the polarization between the poor, small- and mid-sized agricultural producers and the rich, large-scale industrial agricultural producers. It is from within the context of the modern agricultural paradigm and contemporary U.S. agricultural production that the stage has been set and a space created from which grassroots organizations like the CFRA, the NSAS, and other forms of organized resistance have emerged.

% of Recipients	% of Payments	# of Recipients	Total \$ Payments 1995-2010	\$/Recipient
Top 10/				
Top 1%	14%	1,285	\$1,415,009,801	\$1,101,175
Top 2%	23%	2,571	\$2,371,363,087	\$922,350
Top 3%	31%	3,857	\$3,157,309,755	\$818,592
Top 4%	37%	5,143	\$3,826,857,680	\$744,091
Top 5%	43%	6,428	\$4,408,746,760	\$685,866
Top 6%	48%	7,714	\$4,921,169,856	\$637,953
Top 7%	53%	9,000	\$5,375,597,307	\$597,289
Top 8%	56%	10,286	\$5,781,362,084	\$562,061
Top 9%	60%	11,572	\$6,144,982,171	\$531,022
Top 10%	63%	12,857	\$6,473,132,468	\$503,471
Top 11%	66%	14,143	\$6,770,942,482	\$478,749
Top 12%	69%	15,429	\$7,040,648,431	\$456,326
Top 13%	71%	16,715	\$7,285,413,297	\$435,861
Top 14%	73%	18,000	\$7,508,725,863	\$417,151
Top 15%	75%	19,286	\$7,712,406,205	\$399,897
Top 16%	77%	20,572	\$7,897,872,991	\$383,914
Top 17%	79%	21,858	\$8,066,963,733	\$369,062
Top 18%	80%	23,144	\$8,221,985,484	\$355,253
Top 19%	82%	24,429	\$8,364,057,106	\$342,382
Top 20%	83%	25,715	\$8,494,511,714	\$330,333
Bottom80%	17%	102,863	\$1,743,758,973	\$16,952

Figure 3.6 Number and Percentage of Government Subsidy Recipients and Percent of Total Government Payments Received by Recipients

Source: (EWG, 2011)

Chapter IV

WHAT IS ALTERNATIVE AGRICULTURE IN NEBRASKA?

What is 'alternative agriculture' in Nebraska, and what exactly does it mean to be 'alternative?' If something is 'alternative,' what is it an alternative to? These are all relevant and important questions, and depending on the time, place, or person asked, the response is usually different. The last chapter provided the historical background on U.S. agriculture, looked at the agrarian class-structure and stratification of producers in Nebraska, and identified the contemporary U.S. agricultural production model and its social and ecological impact. Chapter III identified small-and mid-sized agricultural producers and classified them as infrasubsistance, substance, or transitional producers. These sub-classes are subordinate to the dominant capitalist producer classes in Nebraska, and a large portion of the membership that makes up the CFRA and the NSAS comes from these subordinate classes. Political-Cultural Formation (PCF) is the process by which subordinate groups, communities, and/or classes form organizations to struggle for their interests. Self-awareness and organization among these subordinate groups are key factors in building the class capacity to fight for its interests and contest hegemony. Political-Cultural Formation presupposes that regional culture, state intervention, and leadership types are the mediating determinants between the class-structural processes and political-formation outcomes.

This chapter examines alternative agriculture and the sustainable agriculture movement. From the perspective of PCF, it explores the different forms, ideologies, and motivations behind alternative agriculture, explains how alternatives constitute forms of resistance, details the sustainable agriculture movement, and identifies organizations that are part of the movement. This chapter also addresses various aspects of alternative agriculture and explores the culture surrounding the sustainable agriculture movement in Nebraska. It examines the perceptions, practices, and purposes of producers that differentiate alternative agricultural production and producers from conventional agriculture. The shared experience of alternative agricultural producers, interaction within the subordinate culture, and how the subordinate culture is received by the dominant culture are also discussed.

The data used in this chapter was collected using a combination of methods, techniques, and sources, such as interviews, historical documents, and participant observation. Agricultural conferences, farm tours, protests, rallies, and sponsored organization events were attended and observed. A series of semi-structured, open-ended, and in-depth interviews was conducted with individuals and focal groups from February 2011 to April 2012. Interviewees were chosen based on their specific knowledge or intimate relationship with the subject, their personal connection to a specific organization, or their overall insider experience with the organization and subject matter. Interviewees ranged from new farmers and landowners interested in starting agricultural production to veteran agricultural producers from both rural and urban settings. Local and state activists, as well as individuals affiliated with local and grassroots organizations and producers and consumers at local farmers markets also participated. Special attention has been given to keeping the respondents' privacy and identity secure. All respondents will remain anonymous, but for citing and reference purposes they will be identified as (NebAlt#1, 2, 3, etc.). A respondent list, which gives general background information on the interviewees, is provided at the end of this paper. Anonymity was guaranteed in order to protect the respondents and interviewees and to create an environment where participants could give the most open and honest answers. Unless noted otherwise, the rest of this chapter reflects the content of the research interviews.

Capitalism's relationship with agriculture and the environment has been damaging, and the contemporary capitalist production system and the current agricultural production model only exacerbated the ecological crisis and social problems many rural communities face. Large corporate and capitalist farmers following the modern agricultural paradigm engage in industrial farming practices that use large volumes of chemicals and water to produce at the highest level of output. In turn, these practices lead to ecological problems. Climate change, the depletion of water resources, and water and air pollution have all been occurring at a faster rate than ever before, and in the case of Nebraska, deep-well irrigation and the bio-fuel industry only accentuate these problems. Currently, U.S. agricultural production accounts for one-fourth of greenhouse gas emissions in the United States, and soil devastation and toxic runoff from fertilizer all contribute to environmental damage (Foster, 2010: 3-5). In the United States, industrial agriculture has taken over as the dominant form of agricultural production, and since the advent of modern agriculture, the natural environment and the conditions needed for lasting

soil fertility have been damaged. North America is the continent with the most severe desertification problem, and since the eighteenth century, approximately 30 percent of U.S. farmland has been abandoned due to salinization, erosion, and water logging. About 90 percent of U.S. cropland is losing soil faster than it can be replaced, and over half of the U.S. pastureland is overgrazed (Lappe et al., 1998: 45).

The overuse of pesticides by industrial farming is another factor contributing to the current ecological crisis in the U.S. Not only does the overuse of pesticides contribute to water contamination and dead-zones in oceans, but it also contributes to the poisoning of agricultural workers. In the United States alone, close to ten percent of all community water wells contain some form of pesticide contamination, and over 300,000 farm workers suffer from pesticide related sickness each year (Lappe et al., 1998: 51). The unfortunate aspect of all these statistics is that the overuse of pesticides has no real effect or contribution to increased crop production. Only 0.1 percent of the pesticides used actually reach the intended target pest, and despite huge increases in the use of pesticides, crop losses due to insects have doubled since the 1940's. Not only are these pesticides ineffective in increasing productivity, but the majority of these chemicals is used only for cosmetic reasons making the product more attractive to consumers (Lappe et al., 1998: 53). With current farming practices, it takes between ten and fifteen energy calories to produce one calorie of food, and that ration is neither energy efficient nor ecologically sustainable (McMichael, 2009: 255-256).

All these facts signify that the current form of industrial agriculture and the U.S. agricultural production model are not environmentally sustainable. United States agriculture needs to cut carbon emissions, use better soil conservation practices, reduce water use and pollution, and find a way to alter the producer's relationship with the land. Furthermore, agriculture must reduce its dependency on petroleum inputs because industrial agriculture and petro-farming only perpetuate social and ecological problems. The increased use of inorganic fertilizers, pesticides, and herbicides, along with the mechanization of farming and the bio-fuel industry add to carbon emissions, environmental stress, and the food crisis. All of these factors indicate that alternative forms of agricultural production need to be introduced and implemented, and the next sub-section examines alternative agriculture and the features that distinguish it from conventional agriculture.

Conventional vs. Alternative

In the broadest sense of the word, alternative agriculture can be anything that differs from conventional farming practices. Practices associated with the U.S. agricultural production model are consistent with conventional agriculture and characteristic of the modern agricultural paradigm. Alternatives are being introduced and used in almost every stage of agricultural production including processing, marketing, and distribution. Large-scale, capital-intensive, highly mechanized farms oriented towards commodity crop production are typical features of conventional or industrial agriculture. Crops produced through conventional agriculture most often become feed and bio-fuel, or are sold for food production for export markets and food aid. This type of agricultural production uses a large amount of energy and relies on capital, petroleum, and industrial inputs. This type of production is also very reliant on technology, and technological fixes are the prescription for issues related to production. Technological fixes are used on the production side in the form of GE crops, advanced equipment and machines, and new farming practices. Technological fixes in processing have led to the development of new foods and ingredients like high-fructose corn syrup, which has become a substitute for natural ingredients in foods produced for wide-spread consumption. Mass consumption of these foods is one of the major drivers of conventional agriculture. The centralization of production and populations, as well as the consolidation of control and power, is also an element of conventional agriculture (Beus & Dunlap, 1990; Bird & Ikerd, 1993; Vandermeer, 1995).

Conventional agriculture has been characterized by some as "the old way of doing things" (NebAlt#5, interview, 2011), practiced by "old white guys" (NebAlt#12, interview, 2012) "pulling implements through the soil...with new technology, fertilizer, and equipment" (NebAlt#7, interview, 2011). Even though this type of production has been called "more efficient" by other producers (NebAlt#5, interview, 2011; NebAlt#7, interview, 2011) and some scholars (Dimitri, Effland, & Conklin, 2005; Johnson, 2009), conventional agriculture customarily relies on petroleum-based, capital inputs and technology for production issues and to address the associated externalities that accompany it. As one producer sees it, conventional agricultural practitioners "seem addicted to standard operating practices" with a reliance on technology, and the addiction to the traditional goes against "the natural order methods" (NebAlt#1, interview, 2011). Conventional agriculture is synonymous with the U.S. agricultural

production model, and it has been described as production that produces large volume, bulk commodities with narrow profit margins (NebAlt#4, interview, 2011), while other producers have characterized conventional agriculture as an anonymous type of production that creates an anonymous, generic product that gets dumped into a large system, a system run on petroleum-based inputs (NebAlt#12, interview, 2012; NebAlt#13, interview, 2012). One producer described conventional agricultural as being "devoured with the desire to be competitive and produce the most at the sacrifice of the land and the environment" (NebAlt#10, interview, 2011). Overall, conventional agriculture is based on competition, lack of cooperation among producers, and on speed, quantity, and profit. It means crop specialization, a narrow genetic-base for seeds, reduced human labor, and new regulations and rules for production. The exploitation of available resources is also characteristic of conventional agriculture and the modern agricultural paradigm (Berry, 1977; Beus & Dunlap, 1990; Bird & Ikerd, 1993; Vandermeer, 1995; Francis & Porter, 2011a; Gomiero, Pimentel, & Paoletti, 2011b).

Alternative agriculture, on the other hand, is harder to define because of the wide range of activities that can be considered alternative. Definitions of alternative agriculture vary from location because, as one producer explained it, "Alternative agriculture is like an onion," with many levels and various layers that can be expressed in different ways. There are alternatives in crops grown, farming methods and practices, and the refinement process, so there can be "a lot of gray area" (NebAlt#7, interview, 2011) when it comes to defining who is involved in alternative agriculture. Organic, sustainable, low-input, bio-dynamic, and regenerative agriculture, as well as ecoagriculture, permaculture, agroecology, and holistic and natural farming are all types of alternative agriculture, while low-input, organic weed management and grass-based animal agriculture are considered alternative methods or practices (Beus & Dunlap, 1990: 593-595; Vandermeer, 1995: 201-201).

No-till, for example, is another farming practice that is considered alternative by many of the producers who use the technique (NebAlt#5, interview, 2011; NebAlt#6, interview, 2011; NebAlt#7, interview, 2011); however, this practice is still high in petroleum and chemical inputs. Compared to some traditional farming methods, no-till is an 'alternative' method which is aimed at stopping erosion, but no-till is still conventional and very much in-line with the modern agricultural paradigm in terms of how it is produced, supplied, distributed, and applied. With no-

till, large amounts of chemicals are applied by industrial sprayers or spray planes to promote soil conservation by not disturbing the topsoil. No-till is an example of a conventional alternative in the sense that using petroleum-based inputs and technology to confront environmental issues is conventional, but the in-field practice of no-till is an alternative practice to working the land with a tractor and plow. Other conventional alternatives include crop cover management, diversified cropping methods, and distinct crop rotations (NebAlt#4, interview, 2011; NebAlt#6, interview, 2011), all of which are alternative practices. However, these practices are normally still petro-intensive and, therefore, they are more aligned with industrial or conventional agriculture. The wide-range of alternative responses to conventional agriculture exists because of the various ways producers have tried to address the negative social, ecological, and economic effects that accompany the contemporary agricultural production model and because of the different ways 'alternative' is defined. No matter how one defines alternative, it has become clear that conventional agriculture is unsustainable in its current form, alternative agriculture implies a sustainable form of agriculture.

The term 'sustainable agriculture' was first used to describe farming and farm systems that were like natural ecosystems (Jackson, 1980), but the term has since grown to include social and economic aspects of agricultural production as well (Gomiero, Pimentel, & Paoletti, 2011b: 13). Sustainable agriculture is an ecologically sound, economically viable, and socially responsible type of agricultural production that crosses national boundaries and extends across generations (Ikerd, 2004). Sustainable agriculture is alternative agriculture, and according to Mary V. Gold and Jane Potter Gates, sustainable agriculture is

A whole-systems approach to food, feed and other fiber production that balances environmental soundness, social equity, and economic viability among all sectors of the public, including international and intergenerational peoples. Inherent in this definition is the idea that sustainability must be extended not only globally, but indefinitely in time, and to all living organisms including humans. (2007: 1-2)

Sustainable agriculture includes farming practices, methods, and systems. Direct marketing and value-added processing within local and community food systems are also part of sustainable agriculture's different moral and ethical approach to agricultural production (Bird & Ikerd, 1993: 98-100; Ikerd, 2001b: 4-7; 2004). Alternatives in agriculture are responses to the negative social,

ecological, and economic effects of the contemporary agricultural production model and the modern agricultural paradigm, and sustainability is the biggest factor that differentiates conventional agriculture from alternative agriculture. Social, ecological, and economic aspects and repercussions all must be considered when deciding what type of agriculture to pursue, and at the same time, there is more to what differentiates alternative and conventional agricultural producers than just their production methods.

One alternative producer explained that it is easy to differentiate conventional producers from alternative producers by looking at the farms surrounding an alternative agricultural producer. He explained,

There are a lot of things that differentiate us, our attitude...of transparency and accountability. There's nothing that I don't do on my farm where I don't stop and think 'How might this affect the environment, how might this affect the people across the fence, how might it affect the people in the community, how might this affect the people downwind, or the people downstream?' I don't mean just downstream, I mean a mile downstream, I mean to Mexico...What you do here can have far-reaching implications, the dead zone in the Gulf of Mexico, for example. (NebAlt#9, interview, 2011)

"Conventional farmers, these guys they go out there and plant their field of corn and then they're gone and don't go back out until someone tells them when to water, when to fertilize, when to take care of it." He continued, "They don't go back in there and cultivate; they don't even turn the soil over. Every conventional farmer today has just a very small choice as to what he plants, what insecticides or herbicides he uses, what fertilizers he uses...every field of corn, every field of beans; one looks like the other" (NebAlt#10, interview, 2011). Some producers attribute these similarities to agribusiness and its takeover of production, which has essentially turned even the biggest farmers into managers for agribusiness. "They (fields and crops) all look the same because they're all done the exact same way" (NebAlt#10, interview, 2011). Commenting on when he was a conventional producer, one interviewee stated, "We didn't think anything about what we were doing; we didn't think about some of the practices that we were using, or some of the things we are doing with our livestock, or how we may impose more humane methods of keeping the livestock... Other practices use the best interest of the land and the people" (NebAlt#9, interview, 2011).

One organic producer said that he saw the main difference between the conventional state of mind and the alternative mind set while he was in a meeting with individuals representing one of Nebraska's Natural Resource Districts (NRD), the Nebraska State Game and Parks Commission, and various other state agencies. The producer and state agency representatives were together to discuss where they would like to see government conservation funds go, and to evaluate where and how the money would be used most effectively. The NRD and Game and Parks people were concerned about water runoff and wildlife, while other offices were concerned about the negative impact of intrusive species. During the meeting the organic producer was never asked for his opinion about what could be done to combat these environmental concerns. A person from each of the state organizations spoke, and after the meeting was over, someone asked the organic producer what he thought should be done. He said, "All of the above" meaning that the organic farmer has to deal with runoff from neighbors' fields, and organic producers protect their fields with filter strips and buffer zones. These zones help prevent soil erosion, but also help protect from conventional fields' runoff and erosion. According to this organic producer,

We protect our soil from erosion by managing cover crops just to help build the soil; these cover crops will aid in the production of wildlife. We set our grounds aside willingly on a percentage basis; basically it's a wildlife terrain right now. The poisoning and contamination of the soils from herbicides and insecticides and the chemical fertilizers being used; we use none of those. (NebAlt#10, interveiw, 2011)

Other differences exist between alternative and conventional agriculture in terms of the producer, their personalities, and their mind set. "The alternative farmer is more innovative; he has to think outside the box" (NebAlt#9, interview, 2011). Organic agriculture is more than just the "right recipe" for raising crops. It also involves "looking into the future," and thinking about "How you are going to farm post-oil agriculture. How are you going to produce as much or more than we do now with a lot less resources? Because the resources we're using in conventional agriculture are finite" (NebAlt#9, interview, 2011). Whereas with conventional agriculture, decision making and innovative thinking are left to others and not done by the actual producer, and today "The co-ops are now out there monitoring crops and telling farmers that they need to spray...The co-ops are changing their nature, changing their model, where the farmers are not even doing it themselves" (NebAlt#12, interview, 2012; NebAlt#36, interview, 2012). "They (farmers) are more a customer base for them (co-ops) and the futures that they are trading and

selling on those crops. The ones who are in it to weather the storms, they've got to buy, sell, and trade. They don't have the luxury of waiting for the market to pick up" (NebAlt#13, interview, 2012).

Another difference between conventional agriculture and alternative agriculture exists between producers' sources of information and how producers interact with consumers. "Conventional farmers rely on the industry for their information, and that is more of a sales effort than an accurate, unbiased source of information" (NebAlt#21, interview, 2011). Conventional farmers use more of a "cookie cutter" type of production, instead of farmer-led, hands-on type of advocacy, and there is no real face-to-face interaction between farmer and consumer in conventional farming (NebAlt#21, interview, 2011). As one alternative producer put it, speaking about conventional agricultural organizations and associations, "The American Beef Council and Midwest Area Association say they're all about connecting the farmer to the consumer, but given the commodity market, the problem becomes reaching the consumer because there are too many middlemen. Commodity production cannot replicate the relationship that the small producer has with the consumer" (NebAlt#9, interview, 2011).

Entry obstacles and barriers exist that prevent people from transitioning into alternative agricultural production. Attitudes like "physical labor is dirty work," (NebAlt#7, interview, 2011) and not being interested in farming unless it can be done with "a modern, high-tech piece of equipment or a machine" (NebAlt#12, interview, 2012) prevent some from entering. Comparatively, an alternative producer explains his situation

A lot of what we do on a daily basis, like roll out wire fences and move animals across the landscape, there's not a lot of glory in that. What we do out here takes a lot more management, you have to be a lot more creative and keep track of land and soil and animals, but a lot of modern day conventional agriculture is a cookbook, a formula where you raise a monoculture of crops, or you take animals and tightly control them in a confinement facility where everything is automated and you really don't have to be a master of animal husbandry as we do out here. You don't have to be a master at understanding the intricacies of soil in a natural state like we do out here, [alternative agriculture takes] a lot more management and a lot more physical labor generally, and that makes a lot of people not interested. (NebAlt#9, interview, 2011)

Different ideas and characterizations of what it means to be alternative and what it means to be conventional, as well as conflicting views of what alternative itself means, can lead to misunderstandings between producers. For some producers, misconceptions about the ease of transitioning from conventional farming to alternative agricultural production or bad information about the economic viability of alternative agriculture can be barriers that prevent entry into this type of production as well. There are other issues like social pressures and negative connotations associated with the "backwards" alternative farmer using animals and a hoe versus the "sophisticated" conventional farmer farming with technology and the "latest and greatest" equipment. Most alternative and conventional producers agree that the technology in modern, conventional agriculture is "amazing" because of technology like "GPS farming, and tractors that you don't have to drive"(NebAlt#12, interview, 2012). One of the biggest obstacles preventing the switch from conventional to alternative production is physical labor. The trend in conventional agricultural production is to replace the human labor component with new, huge, satellite driven equipment that is basically hands-off. "No one young wants to stay on the farm and work, so who's going to do it? …Immigrant labor? American students don't have the work ethic" (NebAlt#12, interview, 2012).

The split between the dominant culture and the subordinate culture is apparent when alternative producers talk about how they are treated or viewed by conventional producers and society at large. Treatment from conventional producers is one reason some producers are "turned off" by alternative production. "Most of these guys don't even consider us to be farmers," but at the same time, most alternative producers do not feel like outcasts or that they are left out of their rural communities (NebAlt#12, interview, 2012; NebAlt#13, interview, 2012). Others producers feel that U.S. society has cast a negative light on manual and physical labor and on any kind of physical work. "People in farming are treated like lower-class individuals. If you're a farmer or if you're a plumber or an electrician, you kinda' have second-rate status" (NebAlt#7, interview, 2011). Clearly, there are some alternative agricultural producers who feel marginalized by society due to their occupational choice or because of where they live, but as one rural producer who had recently returned to the farm after living in the city with his three children said, "I believe rural America offers a better standard of living" despite social preconceptions (NebAlt#7, interview, 2011).

Organic Agriculture

Organic crop production is one of the most recognized forms of alternative agriculture that has been around since the 1970's (Monk, 2011). Organic agriculture reduces all inorganic inputs like fertilizers, herbicides, and pesticides and then replaces them with natural sources or systems like manure, compost, and integrated pest management. These practices help reduce environmental stress, cut petroleum usage, and reduce carbon emissions while lessening the producer's dependency on traditional industrial inputs. Historically, organic production has been about purpose (Ikerd, 2005); however, one contention with organic agriculture is that, in some cases, organic crop production can be equally, if not more, detrimental to the environment than conventional agriculture. For example, some large scale organic operations still employ more machine power than man power; others continue using conventional crop cultivation methods as opposed to controlled grazing management; some practice high-intensity irrigation instead of planting more climate-appropriate crops, and some operations fail to implement any type of crop cover or soil conservation practices. These producers are usually driven by profit, which in some ways perverts and distorts the original principles, ideals, and rationale behind organic production, alternative agriculture, and sustainability. As one organic producer put it, "Just because you are organic doesn't necessarily mean you're more sustainable or that you are automatically better for the environment. Certainly, it needs to be that way, and it can be that way...but I hate to categorize all organic farming as ecologically sound; there are still problem areas" (NebAlt#10, interview, 2011). In general though, organic crops and organic crop production are seen as the healthiest practice that produces quality products for consumers while at the same time having less impact on the environment (Gibson, Pearce, Morris, Symondson, & Memmott, 2007). For some farmers, the motivation for switching to alternative or organic agriculture is strictly economical, while others make the switch because of social, ecological, and even the moral aspects of agricultural production. When asked about the reasons for switching to organic farming, one producer said,

Conventional farmers were told it was their responsibility to feed the world, but conventional farmers can't even feed themselves. The corn being produced is not fit for human consumption, the overuse of chemicals has led to food allergies, and there is no competition in the conventional market. In organic farming there are fewer inputs and more freedom for the producer over what to produce, and customers influence the production instead of industry. (NebAlt#21, interview, 2011)

Also, a sense of moral responsibility led him to convert his operation. Not only is the motivation for transitioning to organic agriculture different among producers, but so is the ideology of the people involved.

Ideological differences exist between conventional farming and organic farming. Organic farming is biological farming that emphasizes soil biology (Tikhonovich & Provorov, 2011: 155-157), "through nutrient dense foods with a focus on food, not commodity production" (NebAlt#13, interview, 2012). "It's all about the soil, building the soil with no artificial inputs, relying on the soil" (NebAlt#10, interview, 2011; NebAlt#11, interview, 2011), and organic final products range from traditional commodities like wheat and corn, to specialty items such as honey and fruit. No matter the final product, organic agriculture involves practices that are generally more eco-friendly, and according to one organic farmer, "that are more in line with the way the natural process is meant to be" (NebAlt#1, interview, 2011). Different still, some organic producers feel that conventional farming is just "using buzzwords to try and cover their type of production," and that "some farmers just don't want to be told what to do if they can't do it the same way" (NebAlt#12, interview, 2012).

Most organic and alternative producers do not harbor ill feelings towards conventional farmers, and as one organic producer noted, "Conventional agriculture is one of many choices on how to farm. We choose to farm a certain way and are part of the alternate ag movement" (NebAlt#12, interview, 2012; NebAlt#13, interview, 2012). Other rifts in ideologies come from the purpose behind production. "Most conventional farmers continuously talk about 'We must feed the world,' but the concept of 'It's our responsibility to feed the world' needs to be redefined. It's kind of arrogant." When asked about the reasons for switching to organic farming, he replied, "The motivation is important, if it's money or if it's biology. If it's biology and biological processes, nature is the model. If that's your motivator, you'll wind up with a healthy product...and if money is your motivation, then there will be more ecological degradation" (NebAlt#12, interview, 2012). Organic producers who are part of the alternative agriculture movement do not have profit as an ultimate goal, not that alternative agriculture is against profit. "Alternative and sustainable agriculture is like a three-legged stool with biological, social, and economic compartments. With a three-legged stool, if you have more of one than the other, the stool is wobbly" (NebAlt#13, interview, 2012). Three essential parts are needed for sustainability: ecological, social, and economic because without all three, sustainability does not exist (Ikerd, 2004).

Over time, the differences between organic and conventional farming become clearer. According to one organic producer, "We can produce more with far fewer inputs and most of our inputs are less, but labor costs are greater. Other inputs are drastically less and we have gotten rid of most of the other inputs altogether" (NebAlt#9, interview, 2011). As another producer stated, "See that out there? The sun is shining; you can't tax that. The biological farmer harnesses that sunlight and nitrogen in the biological cycle," (NebAlt#12, interview, 2012) which reduces a producer's dependency on manufactured inputs. Labor cost is one area where organic and conventional operations tend to differ. Organic operations usually employ more manual labor than conventional operations and, therefore, have a higher cost and investment in labor. Additional human labor helps organic operations cut input expenses like equipment, machinery, and chemical, but labor costs do tend to run higher. In one producer's experience, the recent trend in conventional farming has been to "run more land with a lot fewer people...and replace the labor expense with equipment" (NebAlt#7, interview, 2011). Newer and better equipment can equate to more free time for farmers, but as one conventional farmer sees it, "More free time equals 'you need more land'" (NebAlt#5, interview, 2011). This attitude of needing more land has affected most rural communities through population decline. One reason for this decline is that large conventional farmers continue to buy up more land and replace manual labor with machines, which leads to further rural depopulation.

Higher labor costs and more people working on farms is not necessarily a negative aspect of organic production, and there can be social benefits (Ikerd, 2004; Pearson, 2007: 409-410). More manual labor on the farm translates to more people on the countryside. This population increase helps stimulate social and economic growth, as well as helps in fostering community and rural development (Ikerd, 2001b). Many times the manual labor component is supplied by migrant workers, but even migrant workers spend some money in the communities where they work and live, which adds tax revenue. At the same time, less reliance on mechanized equipment and petroleum inputs helps bridge the metabolic rift and alleviates ecological pressures from conventional agricultural production. Organic production promotes ecologically sustainable development when principles guide production more than profit. Ecologically speaking, sustainability entails using different methods of production that limit carbon emissions, reduce chemical inputs, and respect natural water limits. In Nebraska, organic is one type of alternative agricultural production that, if implemented with an ecological conscience, is one way producers can become better stewards of the land (Wittman, 2010). Alternative agriculture that promotes ecological and social sustainability is beneficial for rural development and rural and urban communities.

Equipment and other input costs for organic agriculture vary slightly from conventional agriculture, although there are some similarities. Initially, capital and start-up costs are high in both styles of production. Both types of production involve equipment, supplies, land, labor, and initial seed or livestock investments. The equipment and land investment in both types of production are similar; however, organic operations tend to be smaller in size than conventional operations. In Nebraska, the average organic operation is close to 866 acres, while conventional farms are around 966 acres (USDA, 2011), but it is hard to call an operation using 866 acres small. This large size for the average organic operation may indicate the possible takeover of the organic industry by conventional agriculture and its integration into the modern agricultural paradigm. Both types of production can use similar machines, but historically, organic agriculturalists use machinery less frequently and less intensely. Supplies and seeds, along with livestock inputs, usually run higher for organic agriculture due to accessibility, availability, and scarcity of organic inputs. Some organic farmers produce their own seed to avoid these issues, and the number of distributors of organic seeds and supplies continues to grow, but the number of organic suppliers is still not at all close to the number of conventional suppliers.

Input costs and ideology are not the only considerations that affect the decision to produce organically or conventionally. Some conventional producers "don't think the organic movement necessarily has a lot of credibility" (NebAlt#7, interview, 2011). There are people who are cheating the organic market or the certification process in order to profit from consumer's demand for organic products. One producer who used to farm organically and was the chairman of certification for his region explained why he is no longer an organic producer. While assistant to the regional certification director, he went to a larger organic operation to verify paperwork and the 'organic' status of the operation. After going to the farm of a "high power, big dollar, huge producer" to perform the certification check, he saw the "hierarchy of

certification" (NebAlt#6, interview, 2011). According to him, no certification check was preformed and, in fact, the crops were obviously not being grown organically. Yet, this operation was still certified organic that same day. In his opinion, products that consumers buy from the store, even if marked and stamped certified, are not always such. Another deterrent from organic farming for this producer had to do with support that he did not receive from the leaders of the "organic movement." At the time, he went to an organic conference looking for market support, but he felt the leaders were trying to control the market and they would not divulge any information on where or how they were selling organic commodities. These two experiences were enough for him to switch back to conventional agricultural production.

Other barriers exist that deter farmers from entry into organic production. Federal policy is a big obstacle for some farmers living on over-production subsidies because these subsidies keep prices up and encourage the expansion of conventional production. There are some government programs that help with organic production expansion, and there are USDA initiative grants available for producers trying to improve their existing organic operations and practices and for those just beginning to farm organically. Most organic producers think that farmers would still be growing organic with or without grant money, and one respondent said he has been waiting for over a year on government support for his organic operation (NebAlt#10, interview, 2011). "Even if you do receive the money promised, it kinda' ties you to people or the organization giving it to you, even if that's the government" (NebAlt#10, interview, 2011). Other issues include social perception versus social reality and how society complains about an issue while acting in a way that contradicts the complaint. "Our kids are getting fat. Healthy school lunches could be helping change that, but we have commodity groups providing a lot of that food and the commodity groups want it to stay this way because it provides a guaranteed market and a place to sell their product" (NebAlt#12, interview, 2012). This situation is a contradiction in the sense that the product kids are eating in school is adding to their health problems but it is their product that they will not take off the menu. Change becomes hard when there is a "complex set of organizations and individuals saying and wanting one thing, but their actions go against what they say they want" (NebAlt#13, interview, 2012).

Perceptions about the economic viability of organic farming are also a concern. One conventional farmer stated, "If it were obviously and easily economically viable to do organic, or

if it were deemed the cutting edge of farming technology, a lot more people would be interested in doing it" (NebAlt#7, interview, 2011). There is more than economics involved and, "The difficult part is finding the balance between keeping care of the environment and making money. I don't have enough time to transition to a new style of farming unless I have land because I won't make enough money. I can't transition to a new form of farming without farming less ground, i.e., I lose money" (NebAlt#7, interview, 2011). Other producers point to the social stigma that surrounds organic production as one of the barriers to entry. One explained,

No one likes having a finger pointed at 'em or being made fun of, and when you step outside of the norm and start farming organically, that's what happens. You're gonna' catch guff about how your field looks...that's probably the biggest thing. It's the shadow over the organic farmer created by these two hundred fifty bushel yields (per acre). If you step in there with an organic farmer you'd see 'em using things out there that they (conventional farmers) consider to be ugly or detrimental or degrading. It's a matter of getting over that and going on. (NebAlt#10, interview, 2011)

"Getting over that and going on," refers to changing how one looks at agriculture and starting the paradigm shift towards a new worldview on agricultural production.

There are other factors that affect the expansion of organic agricultural production, such as the lack of farmer education and support programs, the transition costs associated with the production change, the adaptation of new land and labor management techniques needed for successful alternative agriculture, the transportation of organic goods, and the organic certification guidelines, regulations, and procedures which are all possible deterrents to alternative production. However, one organic producer still feels that, "Probably the biggest thing that affects people from farming organically is that and the paperwork that goes along with certification" (NebAlt#10, interview, 2011). Despite these obstacles, organic agriculture continues to grow in Nebraska, and since 2006 there has been a slight but steady increase in the number of certified organic operations, organic crops, pasture acreage, and total volume of organic sales (USDA, 2007); however, less than one percent of all Nebraska agricultural land is in organic production. Even with less than one percent of its land used for organic, Nebraska ranks eighth nationally in certified organic acreage (USDA, 2007).

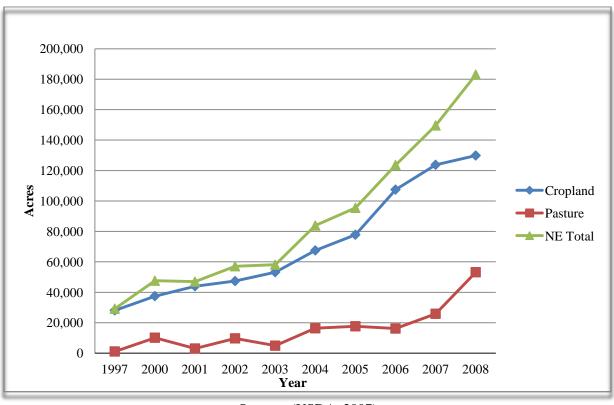


Figure 4.1 Certified Organic Acres in Nebraska

Source: (USDA, 2007)

Markets

Economic viability is always a concern for both alternative and conventional agricultural producers. If markets are accessible, organic production can be as profitable as, if not more profitable than, conventional agriculture because of the higher market price of organic products. According to one producer, organic production over the last four years has been more profitable than his past conventional operation (NebAlt#1, interview, 2011). In fact, he made the original transition to organic farming because he felt that he would not have been able to compete in conventional agricultural production without changing his production methods (NebAlt#1, interview, 2011). Another producer in the eastern half of the state figured his cost for organic corn at around \$43 dollars per acre with an average of about one hundred ten bushel per acre yield after irrigation costs. He compared that to conventional corn production, which he figured at a little less than \$500 dollars per acre cost with about a 220 bushel per acre yield (NebAlt#10, interview, 2011; NebAlt#37, interview, 2012). When asked if alternative agriculture could

compete with conventional agriculture, one producer summed it up, "Absolutely, I would never go back to the old way before we made the transition. I wouldn't go back" (NebAlt#10, interview, 2011).

Markets and the use of alternative markets separate the conventional producer's experience from that of the organic producer, and market access is a major factor related to economic viability. The organic market, just like any other market, has experienced overall fluctuations, but those markets are increasingly becoming more stable, and more and more consumers are adapting to and embracing alternative forms of food production (NebAlt#10, interview, 2011). Consumers perceive organic production as healthier for the environment, people, and animals, and find the final product to be more nutritious (NebAlt#16, interview, 2011; NebAlt#18, interview, 2012). According to organic producers, embracing the consumers is what drives these markets (NebAlt#9, interview, 2011). Connecting farmers to markets and transporting goods to those markets are concerns for many organic and alternative agricultural producers, but today the markets and market access for organic products and producers has improved. "Back in the 80's there was one" (NebAlt#10, interview, 2011).

One organic producer has seen a change in the market structure for organic products, due mostly to the producers. In his opinion, farmers have developed direct markets, but over the last ten to twelve years, big companies have been trying to take over these markets by contracting with unorganized organic producers. He observes that similar to marketing practices for conventional products, this strategy tries to gain market leverage with volume. For this producer, the biggest problem for organic farmers is their lack of marketing knowledge (NebAlt#21, interview, 2011). Organic producers are working to promote their product, to encourage people to purchase and pick-up raw products straight from the farm, and to build relationships with their consumer base. Building this relationship is important to the alternative farmer's cause because "Many people who go to grocery stores just don't know what goes into production or what organic even means" (NebAlt#7, interview, 2011). People want healthy foods grown in ways that do not hurt the environment, but they do not want to get their hands dirty, nor do they understand the required manual labor that goes to organic production. Many organic producers feel the consumer is more aware and knowledgeable than ever before and "The questions consumers are asking are way more complex than ten years ago...But the conflict comes between the urban and

rural rub and the difference between what you want to see on your grocery store shelves and what you get in the field" (NebAlt#13, interview, 2012).

Getting used to the way organic produce looks is sometimes an issue for consumers (NebAlt#16, interview, 2011). Consumers want a healthy product, but they still have not gotten over aesthetic issues of organic production. Consumers are used to seeing grocery stores filled with items that look the same; they want products with the same weight, size, and color. Nature does not produce that way, but when consumers do not get what they expect, they can be put off by organic products. Consumers have grown accustomed to having what they want, when they want it, wherever they are, which is also contradictory to the natural process because climactic issues prevent certain types of production at certain times. Consumers are changing their attitudes, thoughts, and perceptions about organic products, and small organic producers are unable to keep up with demand (NebAlt#13, interview, 2012). This increasing demand for organics has invited corporate influence into the market, and the takeover of the organic market has already begun. Buyers of organics want healthy, fresh products year-round and this desire for organic has led to the creation of stores such as Trader Joe's and Whole Foods (Johnston, 2008; Johnston, Biro, & MacKendrick, 2009b). These kinds of markets and stores still rely on highvolume production and transport over long distances, both of which require petroleum inputs. In this sense, consumers who shop these places are really looking out for their personal interests by buying organic in conventional markets such as these because of the limited benefits that the community and local producers receive.

To a large extent, the once-alternative, organic market has been taken over by the conventional practices and markets and it is being reincorporated into the current food and agricultural production model. Transnational agribusiness corporations have already established footholds in organic markets. "Dole has an organic line, something we have to compete with; Dean Foods Horizon has organic milk; so big players are starting to get into the organic markets because there's money to be made" (NebAlt#13, interview, 2012). Some producers do not necessarily see big corporate players entering the organic game as a completely negative influence because "If someone is producing organically, then de facto, the animals and the land will be treated with organic operations and in organic ways and that's good" (NebAlt#13, interview, 2012). As noted earlier in the chapter, mass production of organics is not always better

environmentally, and it is possible to buy an organic product that is basically produced, processed, and marketed in completely conventional ways (Gibson et al., 2007; Gomiero, Paoletti, & Pimentel, 2011a). Conventional practices have educated organic and alternative producers in some ways as well. "Conventional farmers have economies of scale and efficiency down, and they use technology to cut costs for better or for worse, but there are some good things alternative small-scale farmers can use organizationally... it's a really interesting marriage of organic and conventional in very interesting combinations" (NebAlt#13, interview, 2012).

The economic viability of organic and alternative production is becoming more of a reality due in part to the social attitude toward healthy and locally produced food and because of the development of new markets. Access to markets and market structure are both concerns for organic producers, but the market infrastructure for organic products is much more developed today than it was even five years ago. Still, organic producers do not experience the same market access or availability that conventional producers do, and the lack of markets and market access has led organic producers to seek new marketing strategies and develop and expand distribution possibilities in innovative ways. Direct markets and marketing are what some alternative and organic operations are currently using for sales and distribution while other producers have formed cooperatives. These cooperatives connect people from the city to farms and in some cases, groups, and individuals outside of the collective come out to the farm and pick up the products that they want (NebAlt#10, interview, 2011; NebAlt#11, interview, 2011).

Places like Open Harvest (a cooperative grocery store) still are competing with places like the big shopping marts...Open Harvest is here, functioning in a capitalist system where they have to compete with the High 80's and the Super Savers, but they're offering a value system that everyone has to pay into to benefit from. So, it's doing your part plus five or ten percent. Where are people doing five or ten percent more? By being involved in the collective, by being involved in a cooperative, and knowing how the cooperative runs. They have to contribute somehow to the collective to make it work. (NebAlt#13, interview, 2012)

The attitude of everyone needing to contribute to the group is different from the competition implicit in conventional agriculture and the modern agricultural paradigm, and it indicates a paradigm shift. An example of expanding organic and local markets is the Open Harvest Cooperative Grocery. This food cooperative bypasses conventional food routes and all outside interference in the market and connects producers directly to the consumers. It is a member-

owned retail cooperative dedicated to equitable employment practices, support of local producers, consumer education, and sustainable agricultural practices. Several other cooperatives have formed to distribute and deliver fresh agricultural products directly from producer to consumer. These cooperatives are both rural- and urban-based, and organizations that promote small-scale, sustainable agriculture and healthy food. These cooperatives help with rural development by promoting eco-friendly, healthy farming practices and in connecting producers with consumers. Alternative agriculture in Nebraska is more like a parallel form of development and production that works within the current economic structure to achieve positive change and community development goals, as opposed to introduction of a revolutionary type of production. Alternative agricultural practices usually do not contest or challenge the current economic system or structure of agriculture directly, but they do show that other types of production can fit into the current system and survive, while at the same time promoting positive local development, healthy eating, and ecological stewardship. Locally grown food is starting to become more important than organic due to the corporate takeover of some organic markets, and alternative markets and local and organic food production are all encompassed by the sustainable agriculture movement (Ikerd, 2005; Hendrickson, 2009).

Sustainable Agriculture Movement

What is the sustainable agriculture movement about, what does it mean to be part of the movement, and why are people taking part in this movement? The sustainable agriculture movement has been around for over thirty years, and it is a combination of three different lines of agriculture concern: people concerned about the environment and consumer health, people concerned about rising agricultural input costs and falling prices, and people concerned about the family farm (Ikerd, 2004). The movement consists of people taking the ecological and social repercussions of agricultural production seriously while being economically productive (Francis & Porter, 2011a). "It starts with an attitude questioning things that you do and if traditional practices are really in the best interest of the land, the people eating the food you're producing, and the animals that are under your care. You have to question all those things" (NebAlt#9, interview, 2011). This movement is about "food produced by people who care a lot about the animals, soils, and foods we produce, caring about being part of our community. A certified

organic community...a food island" (NebAlt#13, interview, 2012). The local food community, and making that community available to people are both very important social aspects of the sustainable agriculture movement. "It's about exercising our right to choose what food systems we want" (NebAlt#12, interview, 2012). The sustainable agriculture movement is about expressing uniqueness and diversity by "emphasizing what is unique about the place and the animals we are choosing to breed. We want quality of life as well as the economy of scale, and we want to do it while being good stewards of the environment" (NebAlt#13, interview, 2012). The movement is "creating a different landscape" (NebAlt#13, interview, 2012) with producers who are "concerned about the environment and more concerned about the future, about the families, and the health of the consumers...and it's possible through diversity and alternate production" (NebAlt#10, interview, 2011). One organic producer explained,

Ultimately it comes down to you (the consumer), and you have to be clear about what system you want in place, and when you eat lunch creating that system, you're the one who makes that decision. It's about the birds that come to your bird feeders. It's subtle, but if you're creating a local, healthy environment with greater diversity, you can see the effects in the songbirds. (NebAlt#12, interview, 2012)

Sustainable agriculture is about change, and "It's a slow change, a person by person change, and I think this whole thing has to be a grassroots, bottom up approach by people taking responsibility for themselves and about what they eat, how they spend their money, how they care about their community. It has to be a slow and emerging consciousness" (NebAlt#13, interveiw, 2012). "I think the biggest thing that needs to change is ethics...I keep coming back to this, I don't see this as complicated. I see this as the opposite of complication or complexity; ultimately it is an ethic; it's about caring, understanding that everything is connected, and it ultimately comes down to you and lunch" (NebAlt#12, interview, 2012).

Alternative agriculture and the sustainable agriculture movement in Nebraska involve small- and mid-sized producers, as well as rural and urban consumers who care about the environment, their communities, and their health; people who are conscious about the food they eat, who produces that food, and how food is produced (Altieri, 2008; DiDonato, 2009; Francis et al., 2011b). It includes eco-friendly production methods, innovative farm management techniques, and a return to the natural order. Humane treatment of animals and the development of markets where the producer and consumer have a personal relationship are also critical

elements of the movement. This movement contests the modern agriculture paradigm by implementing different types of agricultural production, challenging traditional markets, and by trying to eliminate the corporate control and influence over food systems, while promoting positive local development, healthy eating, and ecological stewardship (Bird & Ikerd, 1993; Jackson, 1996; Altieri, 1999; Ikerd, 2001b; 2004; 2005; Jordan et al., 2007; Altieri, 2008; Carlman, 2008). The dominant culture's view on food production, local development, and the type of work associated with alternative agriculture does affect markets and small- and midproducers and consumers. That is why challenging the dominant view by raising consumer awareness is paramount for the sustainable agricultural movement to succeed. Success is contingent on changing agricultural hegemony, and hegemony must be contested in four areas: political, intellectual, economic, and cultural. Many consumers are buying organic only for the trendiness and because it is the popular thing to do, and this separates them from consumers who are part of the sustainable agricultural movement. Consumers who are part of the movement have a better social understanding and awareness of how their actions affect producers, and these individuals act on more than just individual self-satisfaction. People who are part of the movement understand what the greater good and common goal is; they are helping the movement move towards a shared vision based on social justice and desirable development, but there are various reactions to the sustainable agriculture movement.

Reaction to the Movement

What is the dominant culture's reaction to the movement? "There is a wide range of reactions to what we do out here depending on how well you are entrenched in industrial or commercial agriculture. If you're in the Farm Bureau, you hate people like me, those people are angry, full of anger and hate because I choose not to use their methods, and I don't know why" (NebAlt#9, interview, 2011). There has been "violent opposition" to some of the animal welfare issues that alternative agriculture supports. One alternative practitioner, "got the governor and the president the Farm Bureau all riled up" over animal welfare issues and the tone of the conversation has only gotten worse. He explained,

They don't understand that what they are promoting is not going to stop the cause; it's much bigger than what any of those guys here in Nebraska have the power to stop. There

is violent opposition and they have their reasons for that, but they're the wrong reasons. I can tell you that they're fighting a battle they'll never win; they will never win over the consumers. They can't convince consumers that it's all right to put an animal in a cage where it can barely move, or that it's all right to dump toxic chemicals on the land and not be concerned about the implication. (NebAlt#9, interview, 2011)

Strong feelings obviously exist on all sides of this issue, and the role of the consumer is just as important as the role of the producer. One organic producer noted,

They want to talk about how ignorant the consumer is and that they're so far removed from agriculture. Educated consumers are the ones who asked us the real questions. They are the ones who made us stop and say maybe we shouldn't be doing some of those practices; they are the ones who have asked the questions and made us stop and think, and the opposition wants to say that the consumer doesn't know anything. Boy, that's really shooting themselves in the foot. (NebAlt#9, interview, 2011)

The state response has not been positive, but "At least they are not slamming the door as hard as they used to" (NebAlt#13, interview, 2012). The state supports certain aspects of the movement with incentives from the University of Nebraska to help with organic certification and the cost of the certification process, although the producers interviewed for this research still had not been paid (NebAlt#10, interview, 2011; NebAlt#11, interview, 2011). There is some conflict between the university and sustainable agriculture movement because some see the industry using university resources to get the research done that they want, often at a lower cost than they could do themselves. "They pay for the results they want to see; now the universities are dependent on funding from the industry" (NebAlt#12, interview, 2012; NebAlt#13, interview, 2012). There is an institute and entrepreneurship endowment offered through the University of Nebraska. It teaches farmers and ranchers to become entrepreneurs, but it is funded by the largest cattle producer in the state, so the type and style of practices being taught and promoted are led by convention (NebAlt#12, interview, 2012). These programs reinforce the dominant culture and modern agriculture paradigm, and some feel that these research projects are more business and marketing ventures than educational tools, and that the real problem with the university came in the 1980's, when, according to this interviewee,

The universities stopped being run for education and started being run as a business...As a society, our collective values do not support education for education's sake or research for research's sake. Individuals run all these things and groups are made up by individuals. But when money is involved, it's the people with money that are getting stuff. (NebAlt#13, interview, 2012)

There are assistance programs for producers who are attempting to go into organic agriculture. These programs are designed to help producers through the three-year transition period it takes to switch to organic production. "Those are the killer years for organic farming, but you must be in an approved area to receive any of that money" (NebAlt#10, interview, 2011). When asked about public support of his farming operation, one producer stated,

Things like living healthy and healthy foods are popular, and eco-friendly practices are in, so alternative agriculture has some public and consumer driven support. Support has increased in the last few years, and the USDA has embraced the need and moved in that direction. They have come up with a few programs that are helpful to those that are in alternate agriculture. I see that as a positive step by the government at least acknowledging that there is a need for what we are doing. (NebAlt#9, interview, 2011)

The state government also has an effect on agriculture. "I think sheer ideological states are bound to fail and I feel here (in Nebraska) you see a lot of combinations of everything... I think we have a schizophrenic culture here. We talk about being such a red (Republican) state and yet these farmers...you know why their hats look like that? They keep sticking their heads in the mailbox looking for their government check" (NebAlt#12, interview, 2012; NebAlt#13, interview, 2012). This joke is made by urban dwellers making fun of farmers being lazy, categorizing all farmers together. The reality of the joke in Nebraska is that a rich, Republican, conventional farmer is getting a government subsidy check and then complaining about how much money goes to social welfare programs aimed at urban poverty alleviation. As a culture here, Nebraska has a very mixed system and mixed culture and one cannot approach some people if certain words are used or else the message will not be received. At the same time, with such a small state population and the unique form of government, much change can come out of Nebraska, at least in regard to agriculture. There are only two million people and voting constituents that need to be organized, united, and impelled to act. The right language and acceptable vocabulary is needed to get the people of the state aware of the cause, on board with the movement, and taking action for change.

The Nebraska unicameral system, by nature, is a nonpartisan body and, therefore, should be apolitical. Mobilizing two million people behind a cause that promotes healthy food, sustainable development, and organic agricultural, and then getting those people to vote for officials who will enact the will of the people as opposed to the will of a political party is a possibility. If the elected officials are indeed exercising the will of the people and the will of the movement, then policy change and government support of alternative agriculture can happen. Since Nebraska plays a pivotal role in national and international agricultural production, a change in Nebraska can have far-reaching implications. Changes made in the state of Nebraska have the possibility to affect national policy because, even with a small population, the senators from each state have equal power, thereby giving Nebraska as much national say and power as any other state. Unfortunately, getting Nebraska to mobilize behind any cause that is not 'red' would seem impossible because of party line voting, even though the unicameral is a nonpartisan body. The current rhetoric surrounding alternative agriculture and the sustainable agricultural movement has been so politicized that alternative agriculture has been painted as a leftist, liberal, tree-hugging, animal-loving, hippie, vegan movement, thus turning the political right and the Nebraska political majority away from the cause.

Organizing the Movement

Corporate interests and industrial farming have been taking over the rural United States for decades, and that takeover is one of the issues the sustainable agriculture movement has organized around. One activist gave his account of how he became active in the movement. About 20 years ago, he was a typical conventional farmer farming about 2,500 acres. At this time, a corporate industrial hog operation tried to move into his county. The hog operation had no transparency in their business dealings, and they attempted to buy land and move into the county without any local people's knowledge and completely under the radar (NebAlt#21, interview, 2011). This hog operation set up a meeting with this producer on a "back road" in an attempt to buy some land from him. A day after the shady attempted land purchase, he organized a meeting with eight neighbors to discuss what was happening. At the meeting, they started to educate themselves about large-scale hog operations. Two days after the first meeting, over 40 people showed up to the next meeting, and two days after that, over 140 people showed up to the next meeting. This led to the establishment of a non-profit, grassroots organization of local and community residents lobbying together to stop these types of operations from setting up in their county. The organization met with state senators and national representatives to find out what avenues needed to be pursued to keep these operations out. Their work paid off with the passage of county level legislation that kept these hog operations out (NebAlt#21, interview, 2011), and their work eventually led to the passage of I-300.

This experience caused the leader of this grassroots, legislative effort to reflect on his own farming operation and he started implementing changes. The experience with the hog operation showed him "who we were controlled by" and how large scale industrial farming really worked. The monopolization of markets by the "big guys" oversaturated markets and limited market options, which in turn, led to low prices on hogs and forced the small producer either to grow to compete or forced him out of the game. "They were stealing from the little guy by using volume as leverage, and you needed a train load (of hogs) to compete" (NebAlt#21, interview, 2011). Not only did the "big guy" have the advantage in volume, but the industry offered deals on inputs to the corporate producers, making it even harder for the average producer to compete. The experience of the individual who refused the 'back road' attempt is not unique, and similar situations like this have occurred all across Nebraska and the Great Plains. This situation highlights the need for leadership and organization within the movement, as well as shows that contesting the modern agricultural paradigm is possible and can be successful through coordinated group effort.

Organization by subordinate classes is important in strengthening civil society, developing a more participatory democracy, and obtaining favorable intervention that supports the organization's interests. Popular-democratic organizations have the ability to contest hegemony and accomplish actual change. In Nebraska, two well-known organizations leading that effort are the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agricultural Society (NSAS). These organizations, along with the Nebraska Farmers Union (NFU) and BOLD Nebraska, have been working to organize subordinate classes and cultures in order to fight for their interests. These organizations have been working to help small- and mid-sized producers and family farmers survive the modern agricultural paradigm through education, organization, and collective action. Their demands are shaped by the shared experience of their members, and their demands have focused on issues such as community and sustainable development, environmentally sound agricultural production, animal welfare, healthcare, and healthy food. These organizations are consolidating and organizing the sustainable agriculture movement no matter if they are officially recognized or considered part of the movement. The

CFRA and the NSAS, as well as some of their joint efforts with the NFU and BOLD Nebraska, are discussed and analyzed in-depth in the following chapter.

Other groups organizing resistance include Community Corps, which is an organization that promotes community supported agriculture (CSA), community gardens, and farmers markets in urban settings. The Nebraska Food Cooperative "fosters a local food community and promotes a culture of stewardship by cultivating farmer-consumer relationships, promoting the enjoyment of healthful food, increasing food security through diversity, and enhancing overall rural sustainability" (Nebraska Food Cooperative [NFC], 2011), and it has been a successful way to get products out, and "They have been successful in staying abreast with products that had a popularity" (NebAlt#13, interview, 2012). The Nebraska Food Cooperative and its CSA's are made up of urban consumers and rural producers who want to eat only one kind of product, that is, a healthy product. Members of these organizations choose to raise a healthy product that usually has the least negative impact on environment. These organizations and collectives are examples of rural and urban individuals working together to cut out the middleman in food systems, and they very much depend on rural-urban coordination and organization in order to maintain a large enough customer base capable of supporting these types of operations. Many of the organic producers interviewed for this research use the Nebraska Food Cooperative as a way to market and sell their products. Slow Food Nebraska is "... an idea, a way of living and a way of eating. It is a global, grassroots movement with thousands of members around the world that links the pleasure of food with a commitment to community and the environment" (Slow Food USA [SFU], 2011). The University of Nebraska funds a cooperative development center, provides grants and funding for Organic Work Groups, as well as sponsors and coordinates Buy Fresh Buy Local Nebraska (University of Nebraska-Lincoln [UNL], 2011), a service that provides educational awareness to the consumer and "encourages the purchase and enjoyment of locally grown food." They also publish a food guide of farmers markets and communitysupported agriculture providers, restaurants and groceries that offer local foods, and local farmers and ranchers who grow and produce Nebraska foods and products.

The Sustainable Agriculture Research and Education (SARE) and Midwest Organic and Sustainable Education Services (MOSES) also provide information to raise public awareness and provide resources for organic and sustainable farming. The Nebraska Environmental Action Coalition and the Nebraska Environmental Trust are two organizations working for improved ecological and environmental stewardship in the state, and publications like *Prairie Fire* and *Graze* contribute to the alternative and organic producers and the sustainable agriculture movement with organizational and educational information. The Nebraska IMPACT project is another example that "has helped Nebraska's people work together towards a sustainable future." Across the state, farmers and ranchers, men and women, rural and urban, have come together to form groups that work to find local solutions to local problems. From farming practices to urban gardening, alternative livestock production to quality of life, IMPACT groups have been looking at problems in new ways, and finding solutions that are bringing real change (Rembert, 2000).

Role of the Internet

Confronting, contesting, and challenging contemporary agricultural production and the modern agriculture paradigm is not just happening in states like Nebraska. Now the Internet and virtual space are also being used in the fight to change hegemony. The Internet has brought new business to alternative producers by eliminating the middleman, and it has been used by alternative agriculturists and the sustainable agriculture movements to educate, recruit, organize, and fund the movement. Through the utilization of social media and social networking, some organizations in the sustainable agriculture movement are now taking a new approach to resistance (Salter, 2011). Today, social media and networking are used in some capacity by most individuals and organizations. From Yemen to Great Britain and all over the Middle East, social movements and resistance groups are using these networks to organize resistance. From flash mobs to full-scale revolution, social media is becoming a new tool and creating new space for organized resistance to contest hegemony and the regimes that support it.

Taking the battle against hegemony into virtual space is one way in which outnumbered, out resourced, and under financed social organizations can compete against a globalized, elite ruling capitalist class and the powers that are currently shaping, influencing, and directing hegemony. By using the Internet, organizations are putting unequal opponents on equal ground (Ess, 2001: 187). To put themselves on an equal playing field, resistance groups must make sense of their situation and who they are to the world at large. Doing so enables them to

construct a social context that transcends their location. In cyberspace, issues are made meaningful through active construction (Bernal, 2005: 661). This is how some forms of organized resistance are fighting for and creating space in which their plight is socially relevant. Virtual space provides a semi-equal playing field in terms of access and expense when compared to traditional means of media exposure like TV or radio. Virtual space comes at a much lower premium than traditional space, and social groups also have the ability to present themselves in whatever manner they choose, as opposed to being cast in a pejorative light by the mainstream media. Also, the use of social media and the Internet is very contemporary and culturally relevant. By taking the fight to virtual space, small and remote organizations become much more accessible. Power resides at the top of commodity chains, and these chains are becoming more and more transnational and globalized. In order to effectively contest the power within those chains, social organizations and other types of organized resistance must become organized locally, and then globalized. Virtual space allows these organizations to become transnational, just like the powers they are attempting to contest.

Eco-Jaunt is one example of social activists using the Internet and virtual space to organize resistance and to contest hegemony controlling the U.S. agricultural production model and food production system in Nebraska, the United States, and the world. The founders of Eco-Jaunt call Oregon home, but they have ties to Nebraska. Eco-Jaunt, established in November, 2010, by two partners, one of whom is a Nebraska native, was started on a limited budget and with few resources compared to those of the governments and corporations they are confronting, but after only a year of existence and six months of Internet exposure, they have already reached over 6,000 people and have established a loyal following. Eco-Jaunt is founded on different ideas and principles related to sustainable development, the green movement, ecological stewardship, community involvement and participation, and alternative agriculture, but it was primarily a sense of moral responsibility, agrarian citizenship, spirituality, and free time that led to its establishment as an official organization. As one founder put it, "Our nation/world is like a car skidding toward a brick wall, and if we can't collectively figure out how to get our foot off the brake and hit the gas in a new direction, we are going to hit that wall" (NebAlt#3, interview, 2011). Eco-Jaunt is developing the skills and passing along the necessary tools for its members to survive if that figurative wall is hit; however, they hope to avoid that wall by educating the public over the Internet with their "how-to" videos. They see raising public awareness and involvement through short, educational (and hopefully entertaining) hands-on learning video demonstrations and through personal testimony of people actually using sustainable practices as the most effective and accessible way of creating change (NebAlt#2, interview, 2011; NebAlt#3, interview, 2011).

As an organization, Eco-Jaunt has created an eco-educational website dedicated to sustainable living. Through the Internet and virtual space, they are empowering their followers with simple, quick, and easy ways to become "part of the fight" for sustainable living with their personal experiences on their self-educating journey across the United States. With only a van, a few dollars, a video camera, a sense of responsibility and lots of passion, Eco-Jaunt is actively contesting hegemony on the intellectual front by means of a new cultural phenomenon, social media. Coming from a pro-active, green community in Portland, Oregon, and within their own short time as an organized resistance group, the founders of Eco-Jaunt feel that they have already started to see and feel the effects and benefits of community action and organization, as well as an increasing interest in the sustainable movement. As the founders see it, "You are a product of your surroundings, and if you can start changing your surroundings to something more socially and ecologically desirable, you are taking the first step" (NebAlt#2, interview, 2011).

Sustainable Alternatives

How one defines and perceives 'alternative' affects what practices are used in the field, what items are purchased in the store, and what is considered community. Personal beliefs and values are reflected in one's actions, and when actions have purpose they are not wasted. The sustainable agriculture movement involves people who are thinking differently about the current state of agriculture, rural development, and consumer health and acting accordingly. The sustainable agriculture movement consists of people and organizations acting and thinking differently about agriculture and food in terms of production, processing, and distribution. A clean environment, healthy food, and having choices as to which methods are used to produce the crops one grows and that go into the food one eats are all aligned with this movement. Being conscious of the environment, of one's actions, and of how those actions affect the community all affect future generations. Equally as important is being able to provide for one's family. Ideas

like justice, equity, fairness, and freedom to choose, as well as respect for living things and sustainable living help form the foundation of alternative agriculture, and these ideals are encompassed in concepts like 'desirable development' and 'social justice' which form the basis of the sustainable agriculture movement.

The sustainable agriculture movement manifests itself differently because of location. Rural and urban areas, geographical location, and climate also affect the movement because of the nature of agricultural and food production. Community gardens and farmers markets, CSA's, and food cooperatives are all examples of alternatives that are connecting the consumer to the producer and helping strengthen local communities. By producers and consumers being linked closer together and having a personal relationship, their awareness of each other and struggles each side faces become clearer and better understood. Understanding is the first step in development of any sort. Understanding the actors involved, the actors understanding the other actors, and everyone understanding the overall goals help make those goals more attainable. Everyone's plight is different, as are the struggles people face; however, by struggling together people can unite to resist a common foe. Currently it seems that the sustainable agriculture movement is a combination of the green, sustainable, health, animal rights, and alternative movements with hints of local and community development, all fighting for the same thing, yet approaching the fight from different angles and on various fronts. If urban consumers and rural producers understand how they affect each other and agricultural production, and if they can work together in a combined effort against a common opponent or towards an agreed-upon goal, change becomes a real possibility.

Chapter V

CLASS FORMATION AND ORGANIZATION

Chapter IV explored alternative agriculture in Nebraska and the sustainable agriculture movement. This chapter focuses on two organizations that have been instrumental in coordinating and consolidating the sustainable agriculture movement in Nebraska: the Center for Rural Affairs (CFRA) and the Nebraska Sustainable Agriculture Society (NSAS). These two organizations and their relation to the Nebraska Farmers Union (NFU) and BOLD Nebraska is also explored. In this chapter, a description and an analysis of these organizations is offered through Political-Cultural Formation (PCF) Theory, an evaluation of the CFRA and the NSAS is given, and a Gramscian-based critique of these organizations' leadership is provided. The majority of the data used in this chapter reflects the research interviews unless cited differently.

Political-Cultural Formation Analysis

As discussed in Chapter II, Political-Cultural Formation (PCF) is the process through which direct producers and other exploited and oppressed social groups shape their demands, form organizations to pursue those demands, and generate leadership to represent them in front of the state and other organizations (Otero & Jugenitz, 2003: 511; Otero, 2004: 332). This formation involves creating and opening space for political opportunity through bottom-up approaches from civil society. Political-Cultural Formation theory can be used to analyze organizations from civil society that are attempting to strengthen themselves and become consolidated in their struggle for hegemony. Political-Cultural Formation can be used to analyze organizations, but it can also be applied to social movements (which are made up of organizations). One of the innovative features of the PCF approach is the distinction it makes between a 'class-in-itself' and a 'class-for-itself.' This distinction allows for an encompassing analysis in which consumers and social activists who are not farmers, but still part of the sustainable agriculture movement, are included. Political-Cultural Formation analysis considers material, economic, social, and cultural struggles faced by an organization or movement, and the

political outcomes that result from those struggles. It provides a comprehensive framework for the analysis of grassroots organizations, as well as explains how subordinate groups, communities, and classes become empowered or hegemonic through an examination of the mediating factors between the class-structural process and political outcomes.

The class-structural process includes the social relations of production and reproduction, as well as how those relations affect cultural relations and meanings influencing a movement (Otero & Jugenitz, 2003: 504-505). Three mediating factors are considered in PCF analysis: regional culture which, in part, helps form the collective identity and base of mobilization for an organization, as well as influence its demands and direction; state intervention, which includes how an organization presents demands to the state and how those demands are met; and leadership type, which includes the leaders of an organization and the organization's internal and external modes of participation. Leadership type not only takes into account how the leadership affects the organization from within, but also how the leadership represents the organization externally in coalitions, alliances, and in front of the state (Otero, 1999; Otero, 2003; Otero, 2004).

The success of the grassroots organizations in this thesis will also be evaluated through an outside perspective focused on the three mediating factors between the class-structural process and political outcomes. The analysis will examine how these organizations contest the dominant paradigm and reach goals, how achieving their goals affects their political-cultural formation development, and if these organizations are empowering rural communities and agricultural producers enough so they can 'survive modern agriculture in Nebraska.'

Regional Culture

According to PCF Theory, regional culture helps shape the collective-identity of an organization, form the content of its demands, and identify the target of those demands (Otero, 1999: 29; Otero & Jugenitz, 2003: 511-515). The identity of an organization is a reflection of regional culture which embodies the history, plight, mission, beliefs, goals, practices, and values of an organization, and regional culture also gives a sense of community to an organization and its members. The organization's demands on the state, issues of grievance, and framework used

to present its struggles have material, economic, and non-economic consequences for subordinate classes and cultures (Otero & Jugenitz, 2003: 510). In this 'war of positions,' (Gramsci, 1971: 229-239; Otero, 2004) framing demands becomes a complex and strategic process, and subordinate cultures can be more successful pursuing their goals if they capitalize on the dominant culture by framing their demands within acceptable cultural language (Grove, 2006: 79-85). At the same time, working within the accepted language has its limits, as counter-hegemonic struggles have to present alternative, popular-democratic perspectives that run against the 'conventional wisdom.' Of course, the United States has a strong radical-democratic tradition that dates back the founding fathers of the nation which helps frame the contesting of hegemony within an acceptable cultural language even when doing so may be tremendously challenging to the current hegemony (Unger, 2012). Historically, the regional culture of the CFRA the NSAS is similar because its members have experienced and witnessed the same effects of the U.S. agricultural production model and the corresponding structural process; however, the demands of these organizations are different and unique, but complementary, from the view point of the subordinate farming class.

The Center for Rural Affairs was established in 1973 by workers from the Goldenrod Hills Community Action Agency, a federally funded, non-profit organization created to eliminate and reduce poverty in five Nebraska counties (Ralston & Strange, 1998). When President Richard Nixon decided to cut funding to all federal anti-poverty organizations, the Goldenrod agency staff developed a survival strategy to preserve and fund their advocacy and development efforts. Eventually, three members of Goldenrod Hills Agency created and incorporated the Center for Rural Affairs in order to address economic, policy, and development issues that were affecting the agricultural base of rural Nebraska. Initially, the CFRA was located in Walthill, Nebraska, and it focused on economic development and research projects in the northeastern part of the state. Over the next few decades, the CFRA expanded its efforts and involvement to include issues affecting all of rural Nebraska and the rural United States. Currently located in Lyons, Nebraska, the CFRA has grown from a small local agency into a nationally-respected and recognized organization with over 30,000 supporters nationwide (CFRA, 2011a).

The CFRA is a private, non-profit Nebraska corporation with an annual budget of over \$3 million dollars, which is provided by private foundations, national church programs, state and federal sources, and individual donations, as well as through earned income from publications, service fees, and speaking engagements. As a registered non-profit, the Center is exempt from federal corporate income tax (CFRA, 2011a). Other than the CFRA board members and staff, there is no formal membership in the organization; there are only supporters who offer their financial support and personal time through active participation. The CFRA maintains a website, provides informative publications and educational resources for the general public, and offers various types of assistance for its supporters. The CFRA is a politically active organization that advocates for rural people and causes by organizing resistance efforts that support rural- and agriculturally-based people and communities. The CFRA is a non-partisan organization that stands for set of values, and, since its inception, the CFRA has resisted advocating for the interests of any particular group. Instead, it has chosen to advance a set of values that reflect what the CFRA considers to be the best of rural America. Ultimately, the CFRA believes that it is acting in the best interest of all, and the organization is working to create a future that reflects their values, which are:

Responsibility placed upon each of us to contribute to our community and society; *Conscience* that balances self-interest with an obligation to the common good and future generations; *Progress* that strengthens rural communities, small businesses, and family farms and ranches; Genuine *opportunity* for all to earn a living, raise a family, and prosper in a rural place; Citizen *involvement* and *action* to shape the future; Widespread *ownership* and *control* of small businesses, farms, and ranches by those who work them. *Fairness* that allows all who contribute to the nation's prosperity to share in it; *Stewardship* of the natural environment upon which all of us - current and future generations – rely. (CFRA, 2011a)

These values are the organization's basis and foundation, and these principles are promoted and expressed by the CFRA through its political participation, community involvement, and rural-focused development projects. The CFRA also gives special attention to family farms.

The CFRA proponents subscribe to the definition of a family farm or ranch as one on which the management and the majority of the labor are provided by the family or families that own the production and at least some of the productive assets (CFRA, 2011a). The CFRA believes that it is more important to decide what system of agriculture people want than it is to define and categorize the farming style of an individual (NebAlt#27, interview, 2012). It feels that it is in the interest of rural America, and all of the United States, to have a strong family farm system of agriculture that provides genuine opportunity for those who work on farms and ranches to own the fruits of their labor and productive assets, offers open opportunity for new people to enter the business even if they are not rich, fairly compensates those who produce food and provides a meaningful share of food system profit to agricultural producers, and maintains a substantial number of farms and ranches, sufficient to support healthy communities (NebAlt#21, interview, 2012; NebAlt#28, interview, 2012). This kind of system promotes farms of varying sizes. The CFRA sees a movement toward a system where production is dominated by a few very large farms with little opportunity for anyone else as a key threat to the family-farm system, smaller commercial farms, and other medium-size farms (CFRA, 2011a). The mission of the CFRA is to "Establish strong rural communities, social and economic justice, environmental stewardship, and genuine opportunity for all while engaging people in decisions that affect the quality of their lives and the future of their communities" (CFRA, 2011a). The CFRA tries to do what its name suggests and be a reputable, reliable, capable, and influential center for rural Americans and for all those who support rural America. The organization believes that, "We live in an era of profound change - when institutions, policy, and life are being fundamentally reshaped. It is a critical time for people of conscience to work together in guiding change to reflect our highest values. To that we commit the Center for Rural Affairs. Values. Worth. Action" (CFRA, 2011a).

The CFRA presents its demands, opinions, research, and critiques in a variety of ways, and it has reduced the legitimacy of agricultural hegemony by pointing out through quality research the negative effects of modern agricultural production. The CFRA has established a rural action network and offers startup investment capital to beginning farmers. The Center is active in the political policy arena, distributes a monthly newsletter, has run hundreds of articles in national periodicals and reviews, is involved in collective organizational projects, supports independent agricultural research, and provides educational services, as well as offers farm training programs, financial support, and consulting advice to rural business owners. It also provides planning and consulting for rural and community development in order to fulfill the organization's goals and mission (Ralston & Strange, 1998; CFRA, 2011a; NebAlt#28,

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interview, 2012). Some of the issues the CFRA finds important to rural populations are healthcare reform, the Farm Bill, school lunch programs, land exchange between retiring farmers and beginning farmers, alternative energy, and rural business and community development (CFRA2011a; NebAlt#21, interview, 2012; NebAlt#27, interview, 2012; NebAlt#28, interview, 2012; NebAlt#32, interview, 2012; NebAlt#35, interview, 2012).

Another grassroots organization challenging modern agricultural production and the conventional farming mindset is the Nebraska Sustainable Agriculture Society. The NSAS was started over 35 years ago by some of the same founders of the CFRA. Originally known as the Nebraska Organic Association, the NSAS changed to its current name in the early 1980's. The organization split, forming the Nebraska Sustainable Agriculture Society and the Organic Crop Improvement Association (OCIA). Today, the OCIA is one of the world's largest organic certifier, and the NSAS has membership and a network that covers the entire state. The NSAS is a non-profit grassroots organization with membership open to "anyone who is concerned about family farming, environmental quality and good, healthy food" (NebAlt#14, interview, 2011), and they boast of their diverse membership which includes "farmers and ranchers, rural and urban consumers, market gardeners, educators, families and restaurateurs" (Nebraska Sustainable Agriculture Society [NSAS], 2008; NebAlt#14, interview, 2011). Their mission statement, "To promote agriculture and food systems that build healthy land, people, communities and quality of life, for present and future generations," explains their ideals and goals and is the driving force behind the organization (NSAS, 2008). The NSAS works to recognize the essential relationship between healthy, local agriculture and a strong, local food system. It believes in the importance of this relationship and in the benefits of food that is grown and processed locally. Food that is produced locally ensures better quality and food security, as well as fosters social and ecological responsibility, which in turn benefits the communities consuming the final product (NebAlt#13, interview, 2012; NebAlt#26, interview, 2012; NebAlt#29, interview, 2012). The NSAS works to strengthen and enhance these systems by raising public awareness, through education, and by providing resources that change how food is produced (NSAS, 2008; NebAlt#14, interview, 2011).

The NSAS is not just a farm organization; its membership consists of rural and urban producers and consumers, market gardeners, educators, and of course, farmers. This unique partnership, from both production and consumer ends, reflects more than just the NSAS. It highlights the diverse backgrounds of the individuals and organizations which are becoming involved with the larger movement that has begun to organize, the sustainable agriculture movement. The NSAS is concerned with renewing sustainable farming and revitalizing a sustainable food system in Nebraska (NebAlt#30, interview, 2012), and its struggle includes building healthy land by promoting farming practices which decrease soil erosion, increase soil fertility, reduce the need for off-farm inputs, protect natural resources, and encourage a diverse landscape through a variety of workshops, tours, and projects which demonstrate environmentally- and economically-sound farming practices; and developing healthy people by working with growers to increase the availability of fresh produce, quality grain products, and farm-fresh beef, pork, poultry, eggs, and other animal products through linking concerned consumers with growers who market these foods (NebAlt#34, interview, 2012; NebAlt#35, interview, 2012). The NSAS advocates farming practices which benefit the environment and human health; creating healthy communities with programs that are built on community networks of farmers, ranchers, businesses, technical assistance providers, and consumers through networks with organizing support, information and education, and opportunities to exchange ideas and experience with other networks across the state; improving the quality of life by strengthening the economic and social base of family farms and rural communities by increasing the use of on-farm resources, and which recognizes the importance of increasing family farm profitability and strengthening local businesses while brightening the environment for present and future generations (NSAS, 2008; NebAlt#29, interview, 2012). These programs focus on the entire family, including opportunities for rural women and children, alongside similar opportunities for urban refugees and immigrants through projects providing outreach, education and support to all ages, genders and across cultures (NSAS, 2008; NebAlt#14, interview, 2011).

The members of the CFRA and the NSAS had similar experiences and shared culture which was the basis of their collective-identity formation and mobilization. Agricultural producers and rural communities experienced similar pressures and effects from modern agricultural production, and the introduction of neoliberal policies in the 1980's only added to the common struggles and marginalization that agricultural producers and rural communities experienced. Shared negative feedback from the system helped unite some rural producers and formed a shared identity. The dominant culture's view and social perception helped solidify the

formation of a collective identity which led to political action in the structured system that challenges the dominant production structure (Tilly & Tarrow, 2007). Shared experience of social marginalization and hardship had detrimental material repercussions for agricultural producers, but these difficulties also led to organization. This subordinate class faces a number of challenges such as reduced numbers, negative urban misperceptions, and lack of understanding of rural culture. In all actuality, small- and mid-sized rural agricultural producers and their families could possibly be considered a subculture within rural culture, and the rural population is already one of the smallest demographic groups in the United States (USDA, 2012a). Rural producers represent less than two percent of the U.S. work force, and they continue to be one of the most marginalized cultural group, have at times been more marginalized than any other group, although they were never as oppressed as most subordinate minority groups, especially those oppressed minorities regarded as different by dominant culture. The CFRA and the NSAS have created the framework used to present their demands and helped establish the collective identity among the once disorganized, fractioned groups of the subordinate farming class.

Framing is important when an organization presents its demands to the dominant culture or the state (Tilly & Tarrow, 2007). Approaching the dominant culture by framing demands in a manner that adheres to cultural norms usually leads to a more favorable outcome for the movement (Grove, 2006: 80). When organizing resistance against agricultural hegemony, the resistance movement must confront hegemony in all areas: culturally, economically, politically, and intellectually. When class demands are presented within cultural constructs in those four regards, the subordinate class can begin challenging hegemony and contesting the modern agricultural paradigm. The CFRA and the NSAS are drawing from the popular culture's increasing awareness about how and where food is produced. The fight against confinement feed operations (CAFO's) for chickens and hogs is being supported by McDonalds and Burger King. The local and slow food movements have grown in popularity and the number of CSA's, farmers markets, community gardens, and consumers utilizing these services continues to increase. Drawing from the alternative and organic agriculture movements, and the local, natural, and healthy food movements, as well as using the popularity of healthy living and eating trends in the state, these two organizations have helped consolidate part of the sustainable agriculture movement (Ikerd, 2004; 2005).

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Politically, these two organizations, along with the NFU and BOLD Nebraska, have influenced farm bills and the health care reform recently passed. They have worked together on passing legislation slowing the TransCanada Pipeline development by giving Nebraska more legal authority to create and enforce environmental regulations. Intellectually, both organizations provide how-to workshops and farm tours and help network members with knowledgeable people in sustainable and alternative agricultural production and food systems. These organizations publish reports on the agricultural census data and they provide assessments on rural poverty and development. Economically, these organizations have worked to develop alternative markets by establishing personal relationships with consumers. They also provide financial and organizational support for small and local business and for family farms and farmers. Business workshops and administrative support are also provided to help these business owners and farmers profit. Technically, subsistence family farms do not produce profits, they realize net revenues. Producing profits makes a farm capitalist, whereas net revenues are used to cover the cost of production including a self-attributed wage. If all farms were profiting instead of just reproducing labor, then there would be the bourgeoisification of the family farm, meaning that all family farms are turning into capitalist farms. The fact that 'profit' is used within the regional culture and by the CFRA and NSAS likely comes from working under bourgeoishegemony and the dominant agrarian and farm culture which developed from the Jeffersonian ideal of an agrarian democracy based on the individual and individual rights as opposed to the common good or group goals. The CFRA and NSAS do have profit in their language, but these organizations are dedicated to more than just individual financial advancement.

The capacity of these organizations to effectively struggle for class demands is directly related to their organizational strength. Material success continues to be difficult but the influence of their demands and culture, and the influence of these organizations has increased public support and raised awareness and signifies that the dominant culture has acknowledged the subordinate class position and accepted some aspects of the movement (Otero, 1999; 2004). That is not to say that all urban consumers understand the demands, but the CFRA and NSAS have engaged many individuals and organizations and been active in creating new groups and organizations, thereby deepening democracy, strengthening the democratic process, and developing civil society even though their goals have not been fully achieved (Gilbreth & Otero, 2001; Otero & Jugenitz, 2003; Fox & Vorley, 2004; White, 2010). They are also contributing to

social and democratic development by giving a voice to the subordinate class and by strengthening, mobilizing, and organizing resistance and support within the class and through alliances and coalitions (Otero, 1999).

The dominant culture and hegemony's moral understanding of agriculture is that "It is our responsibility to feed the world" (NebAlt#5, 2011; NebAlt#6, 2011), which is a false motivation and leads to an imposed sense of guilt and responsibility if producers fail, thereby causing people to believe that that they are really producing to feed the world when, in all reality, 80 percent of the corn produced in Nebraska goes towards ethanol (40 percent) and cattle feed (40 percent) (USDA, 2007; USDA, 2012c; USDA, 2012d). These numbers indicate that industrial corn production, especially in Nebraska, is in no way feeding the world; only that corn production is feeding corporate, capitalist, and bourgeois interests. The rhetoric and reality of the situation could not be farther apart, but the rhetoric has producers believing they really are feeding the world (NebAlt#5, interview, 2011) and the over producing of commodities continues. Farmers continue producing the same way because they believe that their actions will lead to the realization of the goal, when in all reality, their actions are pulling them farther and farther away from the goal of food security, and actually perpetuating the food crisis and reinforcing the control of the transnational corporations and the capitalist class (Lappe et al.,1998; Bello, 2009; Holt-Gimenez & Patel, 2009; NebAlt#5, interview, 2011).

In general, the regional culture of a class or organization is relatively easy to identify; however, the regional culture of a social movement, like the sustainable agriculture movement, becomes more difficult. The sustainable agriculture movement, which is really a combination of various subordinate groups, grassroots organizations, and social-movements, is more complex, especially when the movement is forming coalitions and building alliances. In movements like these, the extent to which the movement is coordinated is very important because each individual organization is still devoted to its specific cause and the people involved mobilize behind different reasons even though the overall movement is attempting to confront problems that stem from the same root cause. In the sustainable agriculture movement, the organizations involved have mobilized behind anything from healthy and local food systems, food security, and food sovereignty to animal welfare, rural autonomy and market availability. Still, others mobilize behind agricultural producers or just because it is trendy to be healthy and fit. All of the

organizations, individuals, and motivations involved make identifying the regional culture and establishing a collective-identity difficult at times. In the case of Nebraska, a collective-identity, continuity from collective experiences and activism, a common enemy, and common goals sometimes exist, and finding these similarities can help strengthen organizations and consolidate movements. When these elements do not exist, the solidarity of the movement might not be as strong and the regional culture may need to be redefined.

Leadership Type and Modes of Participation

Leadership type and modes of participation are the second mediating determination in PCF, and the leadership of the CFRA and NSAS will be discussed with Gramscian suggestions on possible improvements. Leadership types directly relate to an organization's ability to remain independent from the state and autonomous from other organizations with which it forms alliances and coalitions (Otero, 2004). How the leadership represents the members also reflects on the leadership. One aspect of leadership type and modes of participation refers to how the leadership works with the state, if the organization is accountable to its members, if the organization is co-opted by the state, how the organization presents itself while working for change, and how it pushes for action in its favor through the state apparatus. Modes of participation will be looked at from the members of the organization will also be looked at as modes of participation used to contest bourgeois-hegemony and the modern agricultural paradigm.

Accountability and a direct line of communication between members and leadership are important in a participatory-democratic organization. Leadership is responsible for raising the level of consciousness among its constituents, both politically and ideologically, and it is responsible for training new leadership to sustain the struggle. Leadership and the leadership's influence over members and their actions directly relate to the strength and effectiveness of an organization. Both short and long-term goals of the members and the leadership should coincide in a participatory-democratic organization, and members should be aware of the organization's goals and part of the decision making process. In a participatory-democratic organization, internal democracy and accountability are high and the chance of being co-opted by the state or by other organizations is low. Mechanisms for leadership election, formation, and training; leadership accountability; grassroots participation and organizational transparency are all present in participatory-democratic organizations and exhibited by the leadership. Internal and external representation of the membership, how the organization collectively acts, and how the organization negotiates and interacts with the state and other organizations can affect the independence and autonomy of an organization. Strong leadership helps prevent co-optation and leadership accountability deters from corruption and opportunistic behavior. Leadership type also involves the training of new leaders and establishing mechanisms to fill leadership roles because in social movements there is always the chance of leadership being targeted for co-optation, incarceration, or assassination.

There are three typical types of leadership that have been used to explain Latin American organization and movement (Otero, 1999). First, charismatic-authoritarian leadership is concerned with owning the movement as opposed to working for the movement. This type of leadership tends to be less accountable to its constituents, but usually remains independent from the state and other organizations. The second type of leadership is the corrupt-opportunist. This leadership type is usually working for personal interests as opposed to working for the best interest of the organization or movement. This kind of leadership is more easily co-opted by the state, bought out by special interests, or susceptible to forming alliances that do not benefit the organization. Ultimately, this type of leadership is more susceptible to compromising the overall goals and principles of the movement for personal gain, which can result in the loss of autonomy and demobilization or in the organization being discredited. Finally, there is a participatory-democratic leadership style as described above. This leadership type is accountable to its constituents and members and represents the organization independently of the state, autonomously from other organizations, and separate from personal interests.

The NSAS is a participatory-democratic organization with leadership consisting of a 14 to 18 member board and a small staff of between one and five people. At times, there is an advisory committee consisting of up to four individuals. The NSAS is a membership-based grassroots organization with members from all walks of life. Consumers, gardeners, educators, and farmers, both rural and urban, make up the organization's body. The board members are

nominated by fellow members and then elected by the entire membership to serve a three year term. There is no term limit, and officers in the organization are nominated by the board and voted on by all members. The officers, president, vice-president, secretary, and treasurer are selected from the board, and the staff includes an executive director and a membership coordinator. Currently there are two other staff positions, an urban agriculture intern and a Farm2School coordinator. All members who have paid their dues (\$45 dollars for individual/family membership) and attend the annual Rural Advantage/Healthy Farms Conference can vote. The annual conference is the major event for the organization and its members, but the board has quarterly meetings. Meetings are usually conducted face-to-face, but video conferences have also been used. The organization provides a bimonthly newsletter to keep members informed and aware of future events, and it also provides food, consumer, and sustainable living and farming resources on its website. There is a listserve that NSAS uses which has been an effective way for the organization to communicate, and the organization also uses social media to keep members informed and connected (NebAlt#31, interview, 2012). The NSAS offers youth workshops and scholarships, provides members with organic certification information, offers seminars and webinars for new organic and alternative in-field practices, has farmer-support groups, works with beginning farmers through mentoring programs, and develops strategies for rural and community development (NSAS, 2008; NebAlt#14, interview, 2011). Leadership training at the NSAS is semi-formal through workshops and conferences, and some members learned by watching older family members participate as leaders in the organization (NebAlt#19, interview, 2012; NebAlt#30, interview, 2012).

The NSAS modes of participation can be described as less political and more educational and social. The NSAS is a membership organization, whereas the CFRA is more of an "advocacy organization" (NebAlt#35, interview, 2011). The NSAS is somewhat of a "community of organizers," and they are very involved in coalition building, working with other organizations, and in developing new organizations. The NSAS began as somewhat of an "umbrella or resource organization" for organic and sustainable agriculture, and the organization and its members were very active in the local food movement and in establishing farmers markets in the 1990's and early 2000's (NebAlt#14, interview, 2011). NSAS is active in collaborative projects and works with coalitions that support rural community development and the environment. They offer mentoring opportunities for beginning and experienced farmers, as

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well as opportunities for on-farm research, demonstration, and education. The NSAS also offers opportunities for non-farmers to participate in the food system and to network with sustainable and organic Nebraska farmers by linking farmers and non-farmers on all their projects, Throughout the year there are workshops, farm tours, networking opportunities, and field days (NSAS, 2008). The NSAS also helps fill social needs, other than providing networking opportunities and a support system. For many members, the NSAS annual conference is the one time each year where members from the NSAS, CFRA, OCIA, NFU, and other kindred organizations get together to "catch up, keep the continuity going, and see the kids grow up and carry on the vision" (NebAlt#29, interview, 2012). This 'catching up' helps develop the culture of the NSAS members, and reproducing this subordinate culture is one way hegemony is being contested.

One goal of the NSAS is strengthening the relationship between local agriculture and healthy food systems and it works with a number of organizations to accomplish this goal. The NSAS is a member of the Midwest Sustainable Agriculture Working Group and they actively work with Organic Crop Improvement Association (OCIA) and the CFRA. These organizations are like sister organizations for the NSAS, and the NSAS, the CFRA, and the OCIA all have similar roots (NebAlt#14, interview, 2011; NebAlt#13, interview, 2012; NebAlt#34, interview, 2012; NebAlt#35, interview, 2012). In addition to their sister organizations, the NSAS also works with local CSA's, food cooperatives, and farmers' markets. "Buy Fresh Buy Local Nebraska" is a service that provides educational awareness to the consumer and "Encourages the purchase and enjoyment of locally grown food" (UNL, 2011). They also help publish a food guide of farmers' markets and community-supported agriculture (CSA) providers, restaurants and groceries that offer local foods, and local farmers and ranchers who grow and produce local Nebraska foods and products. The NSAS also supports and works with "Community Corps" and "Omaha City Sprouts," two groups which promote CSA and community gardens in urban settings. The Local Food Council and The Nebraska Food Cooperative have connections to NSAS as well. These groups are trying to "Foster a local food community and promote a culture of stewardship by cultivating farmer-consumer relationships, promoting the enjoyment of healthful food, increasing food security through diversity, and enhancing overall rural sustainability" (Nebraska Food Cooperative [NFC], 2012), and Slow Food Nebraska which represents "an idea, a way of living and a way of eating and is a global, grassroots movement with thousands of members around the world that links the pleasure of food with a commitment to community and the environment" (NSAS, 2008; NebAlt#14, interview, 2011; SFU, 2011).

The CFRA has more of an economic-corporate leadership style; however, what makes its brand of economic-corporate leadership different is that its 'corporate' goals are geared towards democracy and empowerment, not financial gain. The leadership of the organization is selected by the board. The board is self-selecting and there is no 'official' membership, only board members, staff, and supporters. Internally, the organization itself is more like participatorydemocratic in nature, and the CFRA usually make decisions by committee. On the off chance that the CFRA is divided on an issue, the executive director technically has the final decision making power (NebAlt#28, interview, 2012). The board holds the leadership accountable, and accountability within the organization means adhering to a set of values that has been set out by the board. The values represent rural and community interests and the values of the organization are what the board, staff, membership, and organization mobilize behind. The work of the organization is guided by these values, and the board and oversight committees are responsible for determining if the organization is filling its mission. The values and principles that the organization is based on are not a strict set of rules or traditional norms which are inflexible, but more like the guiding force behind its actions. Each generation of board members interprets those values, what those values represent, and what goals those values dictate within the cultural context and at the specific temporal moment. Organizations must believe and operate as if they will always exist, yet they must also be prepared to be defeated or repressed, and at the same time recognize that things change with time. That is why the training and preparation of the next generation of leadership for the organization is always important, so that they can interpret and understand whatever contemporary situation within the cultural context and act in the most effective and relevant manner dictated by the situation. Additionally, the organization must be prepared to have its leadership removed, targeted, discredited, bought-out, incarcerated, or killed, all of which have been used historically by the dominant class as methods of putting down social movements and their leadership (Gramsci, 1987; McAdam, 1988; Tyson, 1999).

The CFRA has a board of directors that governs, and the board is comprised of between 12 and 24 members who serve three-year staggered terms. Currently, there are 19 board members who decide policy and overall direction at quarterly meetings. There is an executive

committee and additional oversight committees that counsel staff on the implementation of the Center's various programs, and they meet in conjunction with the regular board meetings. The board consists mostly of farmers and ranchers, small town business and working people, and a few urban members with strong interest in rural development. It is part of the organization's policy to provide leadership from a broad base, and the board is self-selecting from men and women with diverse occupational backgrounds from all regions of the state.

In order to provide continuity and new insight, the CFRA by-laws require at least one new board member to be added yearly. Director Emeritus status was established in 1990 giving permanent board status to the honoree, and there are currently two members with that distinction. The board develops the Center's programs and guides the annual planning for the organization. Each board member serves on a program advisory committee. There are four advisory committees that provide quarterly oversight of the specific program activities: Resource Development and Communications, Budget and Finance, Board Development and Nominations, and Grievance. Both of the Center's main offices are located in Nebraska, but the Center is also involved with national rural networks such as the National Rural Action Network. The CFRA is an organization that promotes grassroots participation from its supporters, and an organization that is led by a 'set of values' as opposed to a group just following a leader. Leadership is elected by the board of directors, and the executive director is expected to make decisions based upon the set of values that the organization represents.

The CFRA is accountable as an organization to both its supporters and to the values it was founded on. Supporters receive a monthly newsletter that informs them about the internal workings, as well as gives calls to action and presents educational topics. A list of donors is published and financial numbers are disclosed. CFRA is also accountable through its transparency, and the staff and board members are accessible to supporters, as well as to the outside public. The CFRA has also earned credibility as an organization working for the same cause for over 40 years. The leadership encourages participation and provides leadership training for its supporters through workshops, conferences, and other educational services. Also through staggered board terms, the leadership is always part veteran and part novice. Leadership is a major factor in how the state receives an organization, if the organization is co-opted, or if the organization retains independence. The CFRA has had the same Executive Director, Chuck

Hassebrook, for over 15 years. Hassebrook just recently returned to his position of Executive Director after taking a leave of absence which began in early 2012, when he announced his bid for U.S. Senate. The CFRA is a non-partisan organization, and as an organization, will not make political endorsements even if that means not endorsing their former director of 15 years. This is an example of the organization not compromising its values and not making special exceptions, even for its leadership. It symbolizes and signifies that CFRA is an organization with its own character, as opposed to the character of one specific individual. Even though the Executive Director had been in that position for 15 years, it does not mean he held that position through authoritarian action. The CFRA has oversight committees, as well as a continuously changing board which evaluates staff performance. Performance evaluations are not based on strict written out standards, but on principles. These principles include caring, service to others over self, commitment to staff and their training, internal equity, shared decision-making, intellectual rigor, courage, forward planning, and practical idealism (CFRA, 2011a).

The Senate run for Hassebrook in 2012 proved to be short-lived. He withdrew from the race after former Nebraska Senator, Bob Kerrey, decided to run. Hassebrook's withdrawal shows his personal commitment to doing what is in the best interest of the organization and class, as opposed to someone working for personal gain or prestige. He has recently reclaimed his position as Executive Director, which was temporarily filled by Brian Depew, one of the younger members of the organization. This experience of serving as temporary director is not only handson training and learning, but it also makes a statement about the CFRA and its preparation for leadership change and its belief in the abilities of the next generation of CFRA leadership. One way the CFRA can gage how the supporters feel is by supporter donations and contributions to the organization. The CFRA encourages participation from its supporters and helps keep them informed and updated with monthly newsletters, e-mails, and calls to action that raise awareness on issues important to rural communities, Nebraska, and the United States. As an organization, the CFRA participates through contentious repertoires of collective action (Tilly & Tarrow, 2007). The CFRA is very active on policy and legislation proposal, and the staff work on different committees to fulfill the purpose of the organization. Rural policy program, rural research and analysis, administration and organizational development, opportunities in stewardship, rural enterprise assistance program, and national rural networks are the seven focus areas of staff involvement. The CFRA staff is compensated for their work at the CFRA, which

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provides equal benefits and similar pay scales where the highest-paid employee of the organization will not make twice the salary of any other employee (NebAlt#28, interview, 2012).

Leadership type affects the kind of alliances and coalitions formed by the organization. It affects the independence of the organization from the state and other organizations and their autonomy from political parties or other class organizations or private firms. Participatorydemocratic leadership encourages participation and is accountable, whereas opportunist leadership takes advantage of situations and would sellout the organization for personal gain. Hassebrook has been on the University of Nebraska Board of Regents for 17 years, serving two terms as the chair. Land-grant universities have connections to the state, as well as to the business interests that sponsor the university. Universities are considered part of civil society, but in some cases, their research agendas may have been co-opted by corporate-agribusiness interests and the bourgeois-hegemonic project. The relationship between UNL and the CFRA could possibly seem like corrupt-opportunist leadership, or it could appear as co-opted leadership; however, Hassebrook has improved University of Nebraska resource research and extension programs, as well as supported rural development and family agriculture through the University (NebAlt#18, interview, 2012; NebAlt#28, interview, 2012; NebAlt#35, interview, 2012). He has led initiatives to make college more affordable for average income families and has emphasized the need for quality teaching. After speaking with supporters, staff, and board members of the organization and after watching his live campaign press conference, it is clear that Hassebrook has charisma. However, unlike the charismatic-authoritarian leadership where accountability is not always present, Hassebrook has shown his dedication to the cause through his service and leadership at the CFRA, which is organizing, educating, mobilizing, and consolidating the movement.

The NSAS and the CFRA work together and partner in projects due to their historical connection, as well as to their geographical locations. Most members in the organization that were interviewed for this research had connections to both the NSAS and the CFRA, and most were associated with the NFU and another activist organization, BOLD Nebraska, and some people interviewed were active in all four of these organizations. It was clear throughout the interview process that participants were aware when they were speaking on behalf of their organization, the CFRA, the NSAS, NFU, UNL, or BOLD Nebraska, and when they were

speaking for themselves as individuals (NebAlt#21, interview, 2011; NebAlt#27, interview, 2012; NebAlt#28, interview, 2012; NebAlt#32, interview, 2012). This distinction shows that the organization and its leadership are aware of what the organization and the cause represent, and it indicated that the staff and leadership are veteran activists aware of the legal and political implications that their responses could carry. It also shows that these organizations are independent from their leadership, sponsors, and members to the point that the organization speaks for itself and has its own independent character. There is no single staff or board member who speaks on behalf the organization unless that is his or her position, nor does the organization solely represent the character of any individual leader, which can be the case with a typical charismatic leader. The character of an organization does reflect the leadership, but if the leadership completely dictates the character and controls the organization, it is not promoting internal democracy nor does it show the organization's commitment to the cause. An organization with its own character that is independent from the leadership is an organization true to the cause or movement because no matter who is in the leadership of the organization, the direction, goals, and mechanisms for accomplishing change will remain the same. This class organization and self-awareness is when a class first becomes a 'class-for-itself' or the subjective moment (Otero, 1999: 31). The demands, struggles, and goals of an organization are part of their culture and it connects members together. The class-structure is also a factor in organization and it shows the economic situation that members collectively face. Organizations develop organically for empowerment, and because of the lack of economic and social opportunity, cultural freedom, and class mobility. These examples support the argument that the NSAS and CFRA have mobilized support from within the class and retained enough strength to receive favorable state intervention and remain independent, as well as show how the CFRA has worked with alliances and coalitions while retaining autonomy. These examples show that independent organizations can influence and work with the state, and that the deepening of democracy, social development, and democratic development occur as civil society is strengthened (Otero, 1999).

One example of the CFRA and the NSAS working together through alliances and coalitions is their opposition to the proposed TransCanada XL Pipeline. BOLD Nebraska, the NFU, the CFRA, and NSAS, along with a multitude of other Nebraska activists and activists organizations worked together to stop the XL pipeline from being rushed through the approval process (NebAlt#17, interview, 2012; NebAlt#22, interview, 2012; NebAlt#23, interview, 2012;

NebAlt#24:, interview, 2012; NebAlt#25, interview, 2012). A Nebraska state special legislative session ended on 22 November 2011, with a unanimous vote by state senators in favor of two bills that will effectively reroute the TransCanada Keystone Pipeline through the state and give a state agency authority to determine the placement of any future pipelines (O'Hanlon, 2011: 1). These bills were signed into law after months of public hearings where hundreds testified, protests and public outcries continued, and coordinated efforts among advocacy groups worked together organizing resistance. This legislation came about after an almost four year long fight against TransCanada and the United States federal government.

This small victory was the end result of bottom-up, grassroots organizing and political action through coalition building between grassroots organizations and individuals in Nebraska. It is also an empirical example of how the development process can be changed through political participation in a democratic system, and how grassroots organizations in Nebraska are working together for sustainability. It also shows that the role of civil society is still an important factor in forming and guiding development policy, and that the (nation-) state is still a critical arena for contesting hegemony even in today's globalized world. Despite the overturning of I-300 in 2007, the passage of LB1 and LB4 in 2011 indicates that the people still have a voice and play an important role challenging corporate interests and in the development process. These organizations helped in creating new legislation that was passed during a legislative Special Session that gave the state the power to reroute or stop the pipeline without an adequate environmental review (BOLD Nebraska, 2012). At the time, Nebraska Governor Heinemann sided with the anti-pipeline coalition, due to the threat of possibly contaminating the Ogallala Aquifer if the pipeline were to leak, and these organizations pushed for and received favorable state intervention to stop the project. Activists from Nebraska pulled from their repertoire of contention (Tilly & Tarrow, 2007: 84) and used collective action in the form of protests, rallies, and a trip to Washington, D.C., to protest in front of the White House where over 100 activists were arrested (NebAlt#15, interview, 2012; NebAlt#17, interview, 2012; NebAlt#24:, interview, 2012; NebAlt#25, interview, 2012). The collective action of this alliance proved effective; however, since the Special Session late in 2011, Governor Heinemann and U.S. Congressman Lee Terry (R) from Nebraska are now urging for the pipeline to be built, working on legislation to cancel current restrictions, and attempting to fast track the process with a new route that bypasses the Sandhills but is still in Nebraska (Kleeb, 2012). This maneuvering is an example of

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how a mobilized coalition or alliance can push for favorable state intervention, and it also shows the need for activists to follow an issue through until the organization, coalition, or alliance has received the concessions that were won.

The CFRA and the NSAS are two organizations that are very similar in terms of their demands, direction, goals, and regional culture, but slightly different in their leadership types and even more so in their modes of participation. These organizations have different methods and approaches in addressing the challenges of the modern agricultural paradigm. The CFRA fights hegemony in the economic and political arenas, while the NSAS is more focused on the cultural and intellectual aspects of the battle. That is not to say these organizations do not confront hegemony in the other arenas: the CFRA offers many educational tools and opportunities for its supporters, but their primary mode of participation deals with legislation and policy; the NSAS is also political and members are working on Farm Bill issues, but they are more focused on hands-on learning experiences, networking opportunities, support services, and on linking urban consumers with rural producers. The NSAS and CFRA are two organizations that are very complimentary, and when working with the NFU, these three organizations cover most aspects of agricultural production. BOLD Nebraska also works well with these organizations and broadens their range by adding an urban element to the coalition.

Leadership Analysis

Both organizations and social movements can be assessed though PCF analysis, and principles related to Gramsci's concept of the political party (1971; 1987) can be applied. According to Gramsci, there are three elements necessary for a political party: a mass element, a cohesive element, and a intermediate element (1971: 179-181; 1987: 152-154). These elements have a specific ratio or proportion that should exist within the organization, and if these ratios exist in the correct proportions, the party cannot easily be defeated (Gramsci, 1987: 149-150). Applying this 'theorem of fixed proportions' to the CFRA and NSAS can help identify aspects of the organizations that should be addressed if they ever intend to change the current economic system or develop a parallel economic system. More intellectual leadership (the cohesive element) in the NSAS may be helpful for the organization in clearing up some of the internal

confusion among the membership and supporters. This element would provide coherency among the NSAS and other organizations they work with on joint projects. This statement is not suggesting that the current NSAS leadership is lacking intellectually; instead, it signifies that the work, coordination, and organization involved in leading an organization is too much for one person. The executive director is expected to carry out the mission of the organization with a limited or nonexistent staff; this task becomes more difficult no matter how capable or intelligent the individual. The NSAS has been very instrumental in helping develop and establish other grassroots organizations and community focused projects related to their cause, to healthy food production and distribution, and to other rural and agriculturally focused development projects. For the most part, these groups still have ties to each other and still work together in some capacity; however, there seems to be confusion or disorganization among the groups, at times, as to the goals, point, or purpose of their combined-effort activities. There were times when it seemed that everyone just assumed that they were all "on the same page," but from an outside perspective during the year-long interview process, the reality of the situation was that, at times, the members were not even "in the same book" so to speak. That is not to say that coalition efforts and collaborations between the NSAS and others organizations are ineffective or that there is lack of mobilization among NSAS members or members from other organizations, only that the end goal and rationale for mobilization were usually never specifically or explicitly explained and defined. If everyone is gathered for the same reason and working for the same goal, but each organization is working from its own agenda, people are not really working together as effectively or as efficiently as possible. There could be more effective use of the network of organizations connected to NSAS with better communication among the leadership of the groups and by getting in sync with each other, and by coordination of the 'subaltern factions' in the war for sustainability.

A liaison between organizations or the creation of a coalition board would be beneficial for all the organizations working on the same cause. Possibly, there are 'too many captains and not enough sailors,' which is a good problem to have in the sense that many organizations have been created from the same base, yet bad because numbers and solidarity are being divided, and in turn, losing the power of the collective voice and identity. This situation implies that the mass element is missing as well. One factor agrarian movements in the United States have been missing since the 1920's when rural populations started to decline dramatically is numbers. That

is why connecting rural organizations with urban populations could be beneficial. Drawing people to the cause is only part of the issue because rural and urban constitute two distinct cultural groups. The regional culture is the collective identity and shared experiences that help a class shape its demands and identify objects of struggle. Rural and urban cultures need something to tie them together in the struggle. The NSAS is working on reaching beyond their target audience and appealing to more than just members of the agrarian and farming class and rural cultural. The NSAS is attempting to encompass the entire working class, urban and rural producers and consumers, and basically, anyone who eats. Crossing cultural, ethnic, and language boundaries is helping unite the cause by adding to the mass element (Piven & Cloward, 2000), and that is what the NSAS is trying to do. Increasing efforts in this area would help to cross these barriers and should lead to more people getting involved with the movement. Possibly targeting other sympathetic movements to the cause and working with leaders from these subordinate groups could prove fruitful. Any marginalized, alienated, outcast, or subaltern organizations that have dealt with any of the negative consequences associated with modern day capitalist production would be a starting point. These organizations need to be incorporated into the new social system that is being created, so possibly by including these marginalized organizations from the beginning, long term social sustainability maybe more easily achieved. Immigrant communities, ethnic communities, alternative lifestyle communities, and poor communities could benefit from working with the NSAS.

The CFRA has remained more focused and retained a clearer direction than the NSAS particularly due to their less democratic internal leadership organizational style. Yet being less democratic is a factor that makes this organization a recognized, respected, effective, autonomous, and independent organization existing within an electoral-democratic republic, advanced capitalist society. The NSAS is basically a pure form of a popular-democratic organization in character, and as an organization, has imagined, initiated, developed, supported, and helped create other semi-autonomous organizations. These other organizations add to the NSAS range, but keeping an organization focused and motivated becomes more difficult when an organization separates and divides its own leadership and starts many independent projects and groups from within its own ranks. The NSAS encourages grassroots participation and has been effective in creating a diverse network of organizations with each group focused on its own particular idea of agriculture and food production issues, while at the same time possibly hurting

its own effectiveness in other areas. The CFRA has maintained its direction and focus in the political and economic arenas for almost 40 years and has not strayed from its values, nor has it over-extended its reach with issues not related to rural development and maintenance. The leadership of the CFRA and their dedication to the values that guide the organization can be credited for this focus. The continued efforts and consistent leadership within the organization highlights the group's dedication to accomplishing goals, its firm stance on issues adds to its legitimacy in the political and economic arenas, and the creditability of the organization is respected.

State Intervention

State intervention is the final mediating factor in PCF, and it analyzes the organization's ability to push for favorable action by the state, and is concerned with how the government has expanded or shrunk political openings for organizations that challenge structural issues. State intervention includes current and future government policy, and how the government and these policies either support or oppose an organization. The important aspects of policy initiatives are purpose and origin. Top-down initiates are usually state-centered and designed for the capitalist class, whereas bottom-up policy proposals tend to focus on civil society and favor democracy. State intervention is viewed from the perspective of the subordinate class or organization, and the character of a subordinate organization tends to be shaped, in part, by the type of intervention (Otero & Jugenitz,2003: 511). State intervention is either favorable or unfavorable depending on how it affects subordinate class interests, and whether intervention results in an organization becoming co-opted by the state, or if an organization remains independent is important. Organizations co-opted by the state have been 'domesticated' and tend to enhance the bourgeois-hegemonic project (Salt & Otero, 2011: 11-12).

Intervention is unfavorable when subordinate class interests are affected negatively and the state reinforces capitalist development and the agrarian bourgeois or capitalist class (Otero, 1999: 30; 2004: 332). Favorable state intervention occurs when an organization receives concession from the state that enhances the reproduction of the subordinate class. There are three organizational responses that typically come from this state/organization interaction: bourgeois-

hegemonic, oppositional, or popular-democratic (Otero, 1999: 24-25). Favorable state intervention that reinforces bourgeois-hegemony and capitalist class interests normally results in co-optation of the organization by the state, while unfavorable state intervention can lead to oppositional class organization. When the state refuses to act in favor of an organization, or just ignores the demands of agricultural producers, class organization is considered oppositional. Oppositional class organizations challenge hegemony and can form as a response to repressive or oppressive state action. Attempts by the government to repress a movement can also lead to the demobilization of an organization or social movement, and tactics like destroying the leadership of an organization or social movement through violence or incarceration have been used historically in the United States and Latin America to put down civil unrest. Unfavorable state intervention and oppositional responses by the state can actually have a positive long-term effect if state intervention leads to the increased support and mobilizations and social movements may be put down; however, organizations can actually gain support and draw more people to their cause due to this type of action.

There are also popular-democratic organizational responses which are oppositional. These responses occur when the subordinate classes or organizations have enough strength, mobilization, and influence to secure favorable intervention from the state while still remaining independent. Popular-democratic results are usually initiated by pressure from below and they signify the consolidation of counter-hegemonic forces. Democratic development and the deepening of democracy occur when civil society is strengthened through popular-democratic outcomes that improve conditions for subordinate classes through either systematic cultural, structural, or policy change. A strengthened civil society has the ability to react to, reduce, or eliminate state oppression, and advance towards democratic political outcomes is only possible through class organization. Favorable state intervention occurs when the subordinate class or organization has consolidated enough support, usually through alliances and coalitions, to push for favorable intervention resulting in a popular-democratic organizational character. Populardemocratic responses indicate that bottom-up organization from within civil society has forced the state to recognize and enact the will of the people. State intervention inevitably affects the character of an organization, but positive state interventions are also possible while an organization remains independent.

State intervention in advanced capitalist societies usually responds to hegemonic interests; however, these societies should also reflect the interests of ascending subordinate classes (Grove, 2006). State intervention ultimately affects the capacity of a class to defend its own interests and its ability to influence change. Becoming a political actor is referred to as the "subjective moment" in political class formation (Otero, 1999: 31), and this moment signifies that a class or organization has become a 'class-for-itself,' working for its own interests and attempting to influence the state apparatus in its favor, as opposed to a 'class-in-itself,' which does not yet have the capacity to push for or influence state intervention. Ideally, organizations want to have the ability to push for favorable, popular-democratic state intervention and still remain independent while working with other independent organizations through alliances and coalitions. The independence and autonomy of organizations reflect the organization's leaders, and leadership type is a determinant in the level of autonomy an organization enjoys.

The CFRA actively interacts with the state. The Center receives some federal and state funds through grants and other programs, works with state universities, and also deals with state politicians on policy development. The CFRA has maintained its independence as an organization and retained mobilization among its supporters. The Center publically voices concerns and opposing views on the state and directly opposes the state on some issues. Depending on the issue, the CFRA will side with or against whomever; their only concern is staying true to the values that guide the Center's work (NebAlt#27, interview, 2012; NebAlt#28, interview, 2012). The CFRA continues to fight and carry on the struggle by focusing on what is best for rural America, and expanding Center operations, assistance, and programs when necessary or possible.

The nature of state intervention towards the CFRA has been mixed, and an example of a subordinate class receiving favorable state intervention, or at least an example of a subordinate class working with different organizations that may have already been co-opted into the bourgeois-hegemonic project, involves the University of Nebraska (UNL), the CFRA, and the NSAS. Even though educational institutions are considered part of civil society and independent of political society, land-grant universities in the United States were originally established by the

government to promote agricultural research. In 1862 when the Morrill Act was passed, these land-grant universities were directly attached to the state (Nebraska), but today the relationship between the university and the state is less direct. The research agendas of many agricultural departments of land-grant universities have been taken over by capitalist interests, which now fund the majority of the research that takes place in agriculture (Kloppenburg, 2004: 58-59). Even though the government is not heavily supporting these universities and their research, capitalist interests have entered into the university and schools are advancing the bourgeoishegemonic project. To some extent these universities have been co-opted by corporate-capitalist interests.

The CFRA's connection to the University of Nebraska is through its Executive Director, Chuck Hassebrook, who has served on the University's Board of Regents for 17 years. The NSAS and University of Nebraska (UNL) also have ties and an almost 15 year-long working relationship. Though these connections seem to imply state or corporate co-option, they are actually more representative of working within civil society through popular-democratic openings. The UNL Agriculture Extension is one of the most active partners of the NSAS and it co-sponsors the annual NSAS convention. As of 2012, two NSAS board members are also University of Nebraska Extension employees (NebAlt#32, interview, 2012). Throughout the course of this relationship, NSAS members indicated only one instance where there was conflict, but in general, the relationship between the NSAS and UNL has been positive (NebAlt#14, interview, 2011; NebAlt#13, interview, 2012), and the CFRA and UNL have also worked together on some projects.

In the conflict between the NSAS and UNL, a keynote speaker at a joint meeting was addressing issues related to corn production and high fructose corn syrup and its health implications. The keynote made a comment that UNL, and more so their sponsorship (Monsanto), disagreed with (NebAlt#14, interview, 2011; NebAlt#13, interview, 2012; NebAlt#19, interview, 2012; NebAlt#30, interview, 2012; NebAlt#34, interview, 2012; NebAlt#35, interview, 2012). As a result, there were discussions regarding the future of their joint sponsorship of the annual event. The NSAS and UNL have since resolved the conflict and they continue to work together on joint projects and conferences.

This incident also shows the independence that the NSAS has from the University, and raises the question about the character of the organization. Which entity has been more affected and influenced by the long relationship? This relationship may represent the democratic nature of these organizations, as well as highlight the strength of their leadership. An important question for future research would be: Who do these dual citizenship members represent first and foremost: themselves, their organization, the University, or a combination of these? It would be helpful to see what guides their decision-making. One member commented that if it were not for the CFRA and Hassebrook's influence on the University, the direction of current research and the corporate takeover of research would be further along (NebAlt#21, interview, 2012; NebAlt#28, interview, 2012; NebAlt#32, interview, 2012). This is the opinion of more than one member of the CFRA and not a statement on UNL or its research direction. It is more a reflection on how the organization's members view their leadership as opposed to a statement regarding influence. Another respondent discussed the nature of the University's relationship with these two organizations: some see that the University's relationship with farmers and the attitude they have regarding research has changed from the 1970's when the CFRA was established. At that time, the University Extension played a more active and direct role with farmers and were less influenced by corporate interests, and the UNL Extension was a direct educational resource for references and networking (NebAlt#13, interview, 2012; NebAlt#35, interview, 2012). Since then, the role of the Extension has changed because the services they once provided are now being provided by private corporate interests (Kloppenburg, 2004; NebAlt#36, interview, 2012; NebAlt#37, interview, 2012). Some see this new approach and change in attitude from UNL Extension as a survival tactic because this is the only place where their educational resources and services are needed (NebAlt#1, interview, 2011; interview, 2012). This producer's explanation shows some of the changes in agriculture and in agricultural education, and it also reinforces the characterization of the modern agricultural paradigm. It shows one way that neoregulation, privatization, and other neoliberal policies have affected the agricultural sector (Kloppenburg, 2004).

An example of unfavorable state intervention is I-300. The final defeat of I-300 in 2007 in the U.S. Supreme Court is an example of unfavorable state intervention and oppositional class organization from the CFRA point of view (NebAlt#32, interview, 2012). At the same time, however, this case is also an example of organizations that have been co-opted by the state being

used to further advance bourgeois-hegemony, the capitalist agenda, and the modern agricultural paradigm. State supported commodity groups and insurance agencies, such as the Farm Bureau and Nebraska Cattlemen, helped bring I-300 to court and challenge its constitutionality (Meyer, 2012). The defeat of I-300, originally designed to protect Nebraska farmers by keeping non-residents and out-of-state corporations from owning land, had the predicted results, and in 2008, a Delaware-based company purchased \$52.8 million dollars of Nebraska farmland (CFRA, 2012).

Another example of oppositional state intervention can be seen in the state's interaction with the Nebraska Farmers Union (NFU) and the Humane Society of the United States (HSUS) partnership regarding the humane treatment of animals and direct food marketing. Although the CFRA and NSAS have not officially joined the debate over concentrated animal feeding operations (CAFO's), the CFRA, the NSAS, and the NFU work together on multiple projects as partners, in alliances, and through coalitions. These three organizations are very much aligned in terms of focus, goals, and direction, and many of the members and leaders of these organizations are members and leaders in the other organizations, and some of the leaders hold or have held positions in all three organizations. The state response to the NFU and HSUS can only be seen as oppositional, and the Governor of Nebraska, Dave Heinemann, has publically threatened individuals and organizations involved in this fight and labeled them as "terrorists, conspiracists, and extremists" (Letheby, 2012). Nebraska State Attorney General, Jon Bruning, allocated \$100,000 dollars of state funds to an organization called "We Support Agriculture," a coalition comprised of the Nebraska Cattlemen, Nebraska Farm Bureau, Nebraska Pork Producers, Nebraska Poultry Industries and the Nebraska State Dairy Association, to oppose NFU/HSUS partnership. The relationship between the state and the Farm Bureau and Nebraska Cattlemen was mentioned throughout the interview process. These organizations represent agribusiness and agrarian bourgeois internal class interests as opposed subordinate or historical agrarian class interests. These organizations represent the dominant class and have been co-opted by the state as shown by the I-300 case and by the state's response to the NFU/HSUS dialogue. Even though the legality of this allocation of state funds has been brought into question, there have been no legal or other repercussions for the Governor, the Attorney General, or the state. This intervention by the state is unfavorable to the agrarian class and oppositional from the NFU/HSUS point of view. These organizations are working to advance capitalist and

agribusiness interests, interests that reinforce the class-structural process and help one class maintain economic advantage over the other.

Chapter VI

FOOD FOR THOUGHT

In Nebraska, two well-known rural-/agriculturally-based organizations are the Center for Rural Affairs and the Nebraska Sustainable Agricultural Society. The CFRA and the NSAS are grassroots organizations working to help small-and mid-sized producers survive the modern agricultural paradigm through class organization and collective action. These organizations are influential in the sustainable agriculture movement, and through coalitions and alliances with other like-minded organizations, are a consolidating force in the struggle. These organizations have been advocating for rural communities, family farms, and small- and mid-sized producers since the early 1970's, and although they use different approaches and methods to challenge the modern agricultural paradigm, they still represent similar class interests. The CFRA and the NSAS have both contributed to class organization on the local and national levels, as well as helped introduce the rural agrarian class to urban populations. Both organizations have remained independent from the state and autonomous from other organizations throughout the struggle, and they contributed to the strengthening of civil society by helping establish other independent organizations. The CFRA and the NSAS are very complementary organizations and, together with the NFU and BOLD Nebraska, have been effective in accomplishing some of their goals. Even though not all of their goals have been achieved, these organizations are still helping to deepen democracy, strengthen the democratic process, and expand civil society by engaging many individuals and organizations and by giving a voice to the subordinate agrarian class. These organizations also show alternative modes of participation used to resist and contest the modern agricultural paradigm in an advanced capitalist system.

Recapitulation

The first chapter of this thesis explained the nature of the problem that Nebraska rural communities, family farms, and small- and mid-sized producers are facing, such as dwindling populations, ecological degradation, and reduced decision making power in the production

process. What has happened since 2007, when the U.S. Supreme Court declared I-300 unconstitutional, is the further appropriation by agribusiness capital of the farming side of the production process. The production process, to a large extent, had already been subsumed under capital, but farmers still maintained some choice in deciding when, what, and how to produce. Their decision-making power has been declining steadily for two reasons: on one hand, agricultural-inputs producers offer what is most profitable for them, not to farmers; on the other hand, the increasingly oligopolistic processors of agricultural goods are also setting the terms of what they want and how they want it produced. Both processes lead to an increasing disappropriation of the farming labor process. The justification for this research and the significance of the thesis as a unique contribution to the field of Development Studies were then explained, and the research specifics were discussed.

Chapter II laid out the theoretical, conceptual, and contextual elements of the research with a review of the literature relevant to the subject. Political-Cultural Formation Theory and its key components were developed, a Gramscian view of the state, civil society, and hegemony were explained, and other important aspects like the agrarian question, alternative agriculture, and social movements were addressed. These elements apply to this research because the grassroots organizations discussed in the study are contesting U.S. agricultural hegemony and the modern agriculture paradigm. These grassroots organizations are different types of organized resistance that emerge from civil society as forms of counter-hegemony and different from the perspective of the subordinate groups and classes which are characterized by their commitment to being 'counter' to bourgeois-hegemony and 'counter' in organizational aspects as well. These organizations are attempting to establish hegemony that is popular-democratic in nature as an alternative to bourgeois-hegemony, and out of the various types of grassroots organizations, popular-democratic organizations are most likely able to influence state interventions in their favor, and thus contribute to actual change. Political-Cultural Formation has been used to analyze the regional culture of an organization or movement which helps shape the demands and identity of organizations, the state intervention which is how organizations are received by the state, and leadership types and modes of participation used internally and externally by these organizations. The key question from a PCF perspective is whether organizations like the CFRA and the NSAS and other subordinate groups, communities and classes are becoming politically formed to struggle for their own interests.

Richter-Tate

Chapter III provided a historical background on U.S. agriculture, identified ecological and social issues stemming from modern agricultural production, looked at the class-structural process in respect to agricultural producers, and defined the modern agricultural paradigm. An examination of the economic-structural process describes the larger socioeconomic context into which agricultural producers are inserted and it addresses the differences between agricultural producers and their relative power, farm sizes, and market access. It shows how the structural process related to the modern agricultural paradigm has led to a differentiated agrarian class with an increasing number of mostly corporate, larger farmers and a diminishing number of family farmers, mid-size farms, and the high number of small farmers who are increasingly unable to generate economic incomes from agriculture alone. For most producers, income has come to depend increasingly on non-farm sources since the 1970's, and this process has been heightened by the neoliberal reformation of capitalism since the 1980's. The agrarian class and five sub-divisions within that class: under-subsistence, subsistence or family, transitional, capitalist, and corporate capitalist, have been established as the points of class differentiation within this research.

Chapter IV presents a large portion of the field work that was conducted and explores alternative agriculture in Nebraska along with the sustainable agriculture movement and its organization. Individuals were interviewed for this portion of the research, but the unit of analysis is collective agents or organizations. Changes in government policy, advances in agricultural practices, methods, and technology, the increased role of agribusiness, and the creation, development, and role of agriculturally-based organizations have all factored into the development of modern U.S. agriculture in its current state. Crisis may be a necessary condition for organization, but it is not a sufficient condition alone. More commonly, economic crises are mechanisms in capitalist dynamics to arrive at a new equilibrium. In other words, there is no economic determinism for the formation of social movements. These factors, as well as the historical uniqueness of the U.S. situation since the 1930's, have only deepened the dependency of producers and created a "class-in-itself" as opposed to a "class-for-itself," meaning the creation of a class working for its own self-determined future with the power, control, and freedom to achieve ends that have both positive social and ecological sustainability in mind.

Chapter V presents the rest of the field work and an analysis of the CFRA and the NSAS is given through PCF Theory. The regional culture, state intervention, and leadership type and modes of participation were discussed for each organization, and examples of coalition building and working with alliances shown. An assessment of the effectiveness and success of these organizations in helping small- and mid-sized producers "survive modern agriculture" is also provided in the chapter and draws conclusions about the nature of these organizations, the role of their leaders in relation to their constituencies, the internal and external modes of participation used by constituencies, and the degree to which these organizations remained independent. By striking down I-300, the U.S. Supreme Court gave free rein to capitalist production in Nebraska, which is consistent with the neoliberal turn in modern agriculture. Since that turn, farmers continue to be more and more like farm managers, producing for large agribusiness corporations. In this way, they have become a form of proletariat with a farmer's disguise, instead of farmers deciding how to run their respective operations. How the CFRA, the NSAS, and other grassroots organizations in Nebraska have responded to the challenges of the structural consequences and the new legal context that emerged from this court decision and the neoliberal turn are important aspects of PCF that have been discussed throughout this thesis. Finally, Chapter VI concludes this thesis with a brief recapitulation, ideas and possibilities for future research, and a few closing thoughts on the subject by the researcher.

Returning to the questions central to this thesis: Under what organizational conditions and to what extent are small- and mid-sized producers "surviving modern agriculture?" Have they been able to do so? And secondarily: How do political-cultural factors affect the success or failure of counter-hegemonic organizations in Nebraska attempting to transform the modern agricultural paradigm? How has the class-structural process affected the agrarian class from which these organizations emerged? What are these organizations working for: complete structural change, ideological transformation, or a political space to work within the current system? Finally, what are the results of these organizations' actions at the local, national, and international levels?

The CFRA and the NSAS are organizations that articulate the demands and struggle of the agrarian class. A shared and similar regional culture is part of what holds the CFRA and the NSAS together, but the leadership within these organizations is an equally important component. The CFRA and the NSAS each have their own distinct leadership type and different modes of participation, both internally and externally. Where the CFRA has focused much of its efforts in the political and economic realms, the NSAS usually contests hegemony in the cultural and intellectual sphere. Both of these organizations have survived since the early 1970's, advocating for rural communities, family farms, and small- and mid-sized producers, and although they use different approaches and methods to challenge the modern agricultural paradigm, they still represent similar class interests.

Working together, these grassroots organizations, along with the NFU and BOLD Nebraska mobilized enough support to halt the TransCanada Pipeline project. At least for now, their fight continues and TransCanada is yet to build through the Sandhills or the state. This victory and sustained struggle is an example of a popularly-supported, widespread resistance effort against capitalist and neoliberal interests. For more than two years, this effort has struggled against TransCanada, and at times, the state and the U.S. federal government. This continued battle is also an example of how coalition building and alliances between grassroots organizations can be effective at contesting hegemony on the state on local, state, and national level. With widespread popular support, the Keystone (TransCanada) pipeline project was stalled with a special legislative session and the passing of a bill. The organizing to stop the pipeline is similar to the I-300 story in many ways. Initiative 300, just like the Keystone pipeline resistance effort, received popular support throughout the state, and legislation was passed establishing a new law. In the case of I-300, this law remained active for 25 years in Nebraska before capitalist interests killed the law in the state supreme court. The passage of I-300 showed how local organization could be affective on a regional scale, and the resistance against TransCanada has similar local, regional, and national implications. Even though there was still popular support for I-300 when it was defeated in court, there was no mobilization in place supporting the effort. Both I-300 and the TransCanada pipeline are high profile examples of organized resistance contesting hegemony, and they represent a subordinate class working 'for-its-self' organizing to resist corporate and capitalist interests.

Resistance means actively contesting the current systems and structures that oppress and actively working for change. This type of resistance involves discussion and understanding between all parties involved, as well as internally within each party itself. This necessity means organizing and mobilizing to achieve an understood end. Exploited, oppressed, and marginalized classes and organizations must have an internal organizational structure that allows them to work within cultural norms, as well as have mechanisms in place for accomplishing their goals. Mobilization can be more effective when the mobilized have a clear sense of where they are going and a clear understanding of what it is they are trying to achieve. Solidarity is strengthened within the group by knowing and believing that other people standing up and fighting are fighting for the same reasons and fighting against the same opponent. Without this type of understanding and clarification, it is easy for any movement to become factionalized, lose morale, and be put down. In general, most organizations do not actively work on destroying the environment, their communities, or the member's personal health; however, if people do not understand how their actions are giving consent to the state and transnational corporations to continue acting in a fashion that destroys the environment, communities, and personal health, they are counterproductive. Uniting their cause and turning it into an actual movement with focus, direction, goals, and clear-cut methods to achieve those goals becomes less likely. However, a movement has already begun, and the sustainable agriculture movement is becoming more and more organized. This movement is a very quiet, more subtle resistance force working on developing sustainable food and agricultural production systems and on establishing a parallel economic system. A better understanding between rural and urban individuals and communities needs to be established, as well as a better understanding among rural producers working under different environmental and social conditions. Urban and rural populations must work together in a manner that collectively supports the environment and their communities.

Future Research

This research answers many questions about the structure of the U.S. agriculture sector and about organizations working for the agrarian class, but it also raises questions as well. There are many directions that the next study could try and address, such as, to what extent has the agricultural lobby kept agriculture shielded from neoliberalism? Why will neither the United States nor the European Union budge in their protectionist agricultural policies? What type of economic model can stop advancement by the neoliberal project in agricultural? How is that model implemented without violence? Another empirical question is which subsectors and firms have benefited most from the advancement of the neoliberal project? Do firms like Monsanto and Cargill, which do business by monopolizing farm products, stand to gain by further liberalization of markets? How are meat processing firms, whose indirect raw material is corn for cattle and chicken feed, affected by further trade liberation? There are also questions specific to Nebraska that need to be addressed as well: how connected to the state apparatus are other agriculturally-based organizations that represent the capitalist corporate interests? How have these organizations maintained their power and voting base, and are there similarities between Nebraska and its far right political tendencies and fascism? Has the split between the two major uses of corn, ethanol and feed, created an intra-bourgeois antagonism that could be emerging from the U.S. policies that encourage ethanol production? How do these interests reconcile their differences?

Closing Thoughts

Currently, alternatives to the modern agricultural paradigm still exist within a capitalist economic system. At the very best, there will only be some wiggle room for a parallel economic system to exist before it is eventually taken over by capitalism or subsumed by capital. The organic market is a perfect example of what happens when corporate interests take over a market of alternative production. A parallel economy will never be in a position to force the necessary changes that will lead to the creation and development of a new economic system. The current capitalist system is designed in such a way that profit equals winning, and therefore, winning means being the best extortionist, so inevitably someone loses. In a system where the bottom-line is all that matters, people are reduced to a number in an equation and are treated accordingly. There needs to be structural change and a new economic system that is based on community, mutual benefit, and progress, as opposed to a system where someone has to lose for someone else to gain. A totalitarian plutocracy billed as a people's democracy does not change the fact that it is what it is, and until individuals, organizations, communities, and alliances can work together and exercise their democracy, the system will remain unchanged.

One goal of sustainable development is eradicating poverty in all places: rural, urban, local, regional, and international. In the United States, organizations are the agent of change and

not the individual. Individualism is a good trait, and it adds to the capacity, diversity, and character of an organization; however, individualism at the expense of the collective good is self-defeating for organizations and part of the trap that keeps the 'troops' from being united. Thinking about the common good of the group is difficult for many in the United States when the cultural norm tells people to be an individual. Society must get past that mentality and start thinking about the community. Organizations must work to develop their local communities, their relationship with regional neighbors, and their world. It is a complete bottom-up approach towards progressive change. Solidarity is built upon relationships between the individuals within the organization and community, and when communities and organizations unite, their strength and solidarity can be enhanced. Organizations must work together in order to challenge hegemony on all geographic levels and in the political, cultural, economic, and intellectual realms of life.

Organizations form for various reasons, and many times the reason is based on a common or collective experience like being marginalized, oppressed, or persecuted. In order to battle hegemony and the social reproduction of that hegemony, organizations must be united locally, regionally, and internationally and their struggle fought political, cultural, economic, and intellectual arenas. Different levels and styles of organization, various political approaches, diverse economic realities, a wide range of intellectual training, and a variety of cultural norms must be taken into account when forming alliances and building coalitions. Organizations need to be aware of all of these factors in order to avoid fighting amongst themselves. Coalitions and alliances will inevitably need to use different modes of participation that are effective at the local, national, and international levels, and the organizations that form these coalitions must be open to new approaches and understand that the means to accomplishing an end might vary depending on the context of the situation, but the goals, purpose, and direction of the organization can still remained unchanged.

So, when do independent organizations working together through collective action become a social movement? When does that movement become a revolution? Is true democracy just a continuous peaceful revolution led by the people? When are the conditions right for the creation of a national-popular party or a common party based on the people's collective will that can lead such a revolution? In all revolutions, there comes a time for action, and that action needs to be initiated by an organization with quality leadership and a strong culture. The sustainable agriculture movement may be in position to spark the revolution in U.S. agriculture or at least in position to add some fire and direction to the revolution that has already begun.

LIST OF INTERVIEWEES

NebAlt#1: Organic producer, NSAS, CFRA, NFU NebAlt#2: Activist, Eco-Jaunt NebAlt#3: Activist, Eco-Jaunt NebAlt#4: Organic producer, former co-op manager NebAlt#5: Conventional producer. NebAlt#6: Conventional producer, former organic producer **NebAlt#7:** Conventional producer NebAlt#8: Activist, Occupy NebAlt#9: Alternative producer, NSAS, CFRA, NFU NebAlt#10: Organic producer, NSAS, CFRA, NFU NebAlt#11: Organic producer, NSAS, CFRA, NFU NebAlt#12: Organic producer, NSAS, NFU NebAlt#13: Organic producer, NSAS NebAlt#14: Organic producer, NSAS NebAlt#15: Activist, BOLD NebAlt#16: Activist NebAlt#17: Activist, BOLD NebAlt#18: Activist NebAlt#19: Organic producer, NSAS, CFRA, NFU NebAlt#20: Activist NebAlt#21: Organic producer, NSAS, CFRA, NFU NebAlt#22: Activist, BOLD NebAlt#23: Activist, BOLD NebAlt#24: Activist, BOLD NebAlt#25: Activist, BOLD NebAlt#26: NFU NebAlt#27: CFRA NebAlt#28: CFRA NebAlt#29: NSAS NebAlt#30: NSAS NebAlt#30: Organic producer, NSAS, CFRA, NFU NebAlt#31: Alternative producer, NSAS NebAlt#32: CFRA NebAlt#33: Activist, alternative producer NebAlt#34: Organic producer, NSAS, CFRA, NFU NebAlt#35: Organic producer, NSAS, CFRA, NFU NebAlt#36: Conventional seed dealer NebAlt#37: Conventional producer

BIBLIOGRAPHY

- Abaidoo, Samuel & Harley Dickinson (2002). "Alternative and Conventional Agricultural Paradigms: Evidence from Farming in Southwest Saskatchewan." <u>Rural Sociology</u>, 67 (1): 114-131.
- Aiken, David (2007) "Federal Court Invalidates Initiative 300." Cornhusker Economics, 2.
- Albrecht, Don E. & Steve H. Murdock (1990). <u>The Sociology of U.S. Agriculture</u>. Ames, Iowa State University Press.
- Altieri, Miguel A. (1994). <u>Biodiversity And Pest Managment in Agroecosystems</u>. New York, Haworth Press.
- ---. (1999). "The Ecological Role of Biodiversity in Agroecosystems." <u>Agriculture, Ecosystems</u> <u>and Environment</u>, 74: 19-31.
- ---. (2008). The "Divide" in the Alternative Agriculture Movement: Fueling the Debate. <u>Global</u> <u>Alternatives</u>, CENSA.
- Anand, Sudhir & Amartya Sen (2000). "Human Development and Economic Sustainability." <u>World Development</u>, 28 (12): 2029-2049.
- Andree, Peter, Jacqui Dibden, Vaughan Higgins, & Chris Cocklin (2010). "Competitive Productivism and Australia's Emerging 'Alternative' Agri-Food Networks: Producing for Farmers' Markets in Victoria and Beyond." <u>Australian Geographer</u>, 41 (3): 307-322.
- Antle, John M. (1988). <u>World Agricultural Development and the Future of U.S. Agriculture</u>. Washington, D.C., American Enterprise Institute for Public Policy Research.
- Bailey, Jon M. & Kim Preston (2003). Swept Away: Chronic Hardship and Fresh Promise on the Rural Great Plains. Affairs, Center for Rural. Winnebago, NE, Center for Rural Affairs: 1-45.
- ---. (2011). Census Brief 1: Population Change on the Great Plains. Affairs, Center for Rural. Lyons, NE, Center for Rural Affairs.
- Bair, Jennifer (2005). "Global Capitalism and Commodity Chains: Looking Back, Going Forward." <u>Competition & Change</u>, 9 (2): 153-180.

- ---. Ed. (2008). <u>Frontiers of Commodity Chain Research</u>. From Commodity Chains to Value Chains: Interdisciplinary Theory Building in an Age of Globalization, Stanford University Press.
- Bair, Jennifer & Enrique Dussel Peters (2006). "Global Commodity Chains and Endogenous Growth: Export Dynamism and Development in Mexico and Honduras." <u>World</u> <u>Development</u>, 34 (22): 203-221.
- Barger, W. K. & Ernesto M. Reza (1994). <u>The Farm Labor Movement in the Midwest: Social</u> <u>Change and Adaptation</u>. Austin, The University of Texas Press.
- Barkley, Paul W. (1988). "The Effects of Deregulation on Rural Communities." <u>American</u> <u>Journal of Agricultural Economics</u>, 70 (5): 1091-1096.
- Barlas, Y., D. Damianos, E. Dimara, C. Kasimis, & D. Skuras (2001). "Factors Influencing the Integration of Alternative Farm Enterprises into the Agro-Food System." <u>Rural</u> <u>Sociology</u>, 66 (3): 342-358.
- Bello, Walden (2009). The Food Wars. New York, Verso.
- Bennett, Stephen Earl, Staci L. Rhine, & Richard S. Flickinger (2000). "Reading's Impact on Democratic Citizenship in America." <u>Political Behavior</u>, 22 (2): 167-195.
- Berberoglu, Berch Ed. (2009). <u>Tools for Change: A Handbook for Critical Development Studies</u>. The Centrality of Class in Critical Development Studies. Zacatecas, Zac., Mexico, Universidad Autonoma de Zacatecas and CDS Network.
- Berg, Lawrence D. (2011). "Banal Naming, Neoliberalism, and Landscapes of Dispossession." <u>ACME</u>, 10 (1): 13-22.
- Bernal, Victoria (2005). "Eritrea on-Line: Diaspora, Cyberspace, and the Public Sphere." <u>American Ethnologist</u> 32 (4): 660-675.
- Berry, Wendell (1977). <u>The Unsettling of American Culture & Agriculture</u>. New York, Avon Books.
- Best, Samuel J. & Brian S. Krueger (2005). "Analyzing the Representativeness of Internet Political Participation." <u>Political Behavior</u>, 27 (2): 183-216.
- Beus, Curtis E. & Riley E. Dunlap (1990). "Conventional Versus Alternative Agriculture: The Paradigmatic Roots of the Debate." <u>Rural Sociology</u>, 55 (4): 590-616.

- Birch, Kean (2008). "Alliance-Driven Governance: Applying a Global Commodity Chains Approach to the U.K. Biotechnology Industry." <u>Economic Geography</u>, 84 (1): 83-103.
- Bird, G. W. & John Ikerd (1993). "Sustainable Agriculture: A Twenty-First-Century System." <u>Annals of the American Academy of Political and Social Science</u>, 529 (Rural America: Blueprint for Tomorrow): 92-102.
- Blake, Megan K., Jody Mellor, & Lucy Crane (2010). "Buying Local Food: Shopping Practices, Place, and Consumption Networks in Defining Food as "Local"." <u>Annals of the</u> <u>Association of American Geographers</u>, 100 (2): 409-426.
- Blee, Kathleen, Elisabeth Clemens, Donatella Porta, Mario Diani, Martin Hughes, Hank Johnston, Ruud Koopmans, Paul Lichterman, Debra Minkoff, Daniel Myers, Pamela Oliver, Dieter Rucht, Jackie Smith, David Snow, Sidney Tarrow, Verta Taylor, & Danny Trom (2002). <u>Methods of Social Movement Research</u>. Minneapolis, University of Minnesota Press.
- BOLD Nebraska (2012) "TransCanada Pipeline."
- Borras, Saturnino M. (2008). "La Via Campesina And Its Global Campaign for Agrarian Reform." Journal of Agarian Change, 8 (2 & 3): 258-289.
- Brown, Ed, Ben Derudder, Christof Parnreiter, Wim Pelupessy, Peter J. Taylor, & Frank Witlox (2010). "World City Networks and Global Commodity Chains: Towards a World-Systems' Integration." <u>Global Networks</u>, 10 (1): 12-34.

Buci-Glucksmann, Christine (1980). Gramsci and the State. London, Lawrence and Wishart.

- Busch, Lawrence & Carmen Bain (2004). "New! Improved? The Transformation of the Global Agrifoood System." <u>Rural Sociology</u>, 69 (3): 321-346.
- Buttel, Frederick H. (2000). The World Trade Organization and the New Politics of Gmo's. <u>Annual Meeting of the Rural Sociological Society</u>. Washington D.C.
- ---. (2001). "Some Reflections on Late Twentieth Century Agrarian Political Economy." <u>Sociologia Ruralis,</u> 41 (2): 165-181.
- ---. (2003a). "Internalizing the Societal Costs of Agricultural Production." <u>Plant Physiology</u>, 133: 1656-1665.
- ---. (2003b). "Some Observations on the Anti-Globalization Movement." <u>Australian Journal Of</u> <u>Social Issues</u>, 38 (1): 95-116.

- ---. (2005). "The Environmental and Post-Environmental Politics of Genetically Modified Crops and Foods." <u>Environmental Politics</u>, 14 (3): 309-323.
- Buttel, Frederick H., Olaf F. Larson, & Gilbert W. Gillespie (1990). <u>The Sociology of Agriculture</u>. New York, Greenwood Press.
- Buttel, Frederick H., Oscar W. Larson III, Craig K. Harris, & Sharon Powers (1982). "Social Class and Agrarian Political Ideology: A Note on Determinants of Political Attitudes among Full- and Part-Time Farmers." <u>Social Forces</u>, 61 (1): 277-283.
- Buttigieg, Joseph A. (1995). "Gramsci on Civil Society." Boundary 2, 22 (3): 1-32.
- Carlman, Inga (2008). Control System for Sustainble Development. <u>Computing Anticipatory</u> <u>Systems-Eighth International Conference</u>. Dubois, D.M. American Institute of Physics.
- Carolan, Michael S. (2006). "Do You See What I See? Examining the Epistemic Barriers to Sustainable Agriculture." <u>Rural Sociology</u>, 71 (2): 232-260.
- Castle, Emery N. (1998). "A Conceptual Framework for the Study of Rural Places." <u>American</u> <u>Journal of Agricultural Economics</u>, 80 (3): 621-631.
- Center For Rural Affairs. (2011a). "Center for Rural Affairs." Retrieved October 10, 2011, 2011, from <u>http://www.cfra.org/</u>.
- ---. (2011b). "Friends of the Constitution." Retrieved April 4, 2011, from <u>http://www.cfra.org/i300/home</u>.
- ---. (2012). "The Future Is Now— a Delaware Corporation Pays \$52 Million for Nebraska Land." <u>Center Newsletter</u> Retrieved March 17, 2012, 2012.
- Chayanov, A. V. (1966). The Theory of Peasant Economy, Homewood.
- Clifford, Nicholas, Shaun French, & Gill Valentine (2010). <u>Key Methods in Geography</u>. Los Angles, Sage.
- Cochrane, Willard W. (1979). <u>The Development of American Agriculture: A Historical</u> <u>Analysis</u>. Minneapolis, University of Minnesota Press.
- Coe, Neil M., Peter Dicken, & Martin Hess (2008). "Global Production Networks: Realizing the Potential." Journal of Economic Geography. 8: 271-295.

- Coe, Neil M., Peter Dicken, Martin Hess, & Henry Wai-Cheung Yeung (2010). "Making Connections: Global Production Networks and World City Networks." <u>Global Networks</u>, 10 (1): 138-149.
- Crampton, John A. (1965). <u>The National Farmers Union: Ideology of a Pressure Group</u>. Lincoln, University of Nebraska Press.
- Crump, Jeff R. & Christopher D. Merrett (1998). "Scales of Struggle: Economic Restructuring in the U.S. Midwest." <u>Annals of the Association of American Geographers</u>, 88 (3): 496-515.
- Danbom, David B. (1995). <u>Born in the Country</u>. Baltimore and London, The Hohns Hopkins University Press.
- Daviron, Benoit & Isabelle Vagneron (2011). "From Commoditisation to De-Commoditision...And Back Again: Discussing the Role of Sustainability Standards for Agricutural Products." <u>Development Policy Review</u>, 29 (1): 91-113.
- Day, Richard J. F. (2005). Gramsci Is Dead. London, Pluto Press.
- Deller, Steven C., Tsung-Hsiu Tsai, David W. Marcouiller, & Donald B. K. English (2001). "The Role of Amenities and Quality of Life in Rural Economic Growth." <u>American Journal of Agricultural Economics</u>, 83 (2): 352-365.
- Desmarais, Annette Aurelie (2002). "The Via Campesina: Consolidating an International Peasant and Farm Movement." Journal of Peasant Studies, 29 (2): 91-124.
- ---. (2007). <u>La Via Campesina: Globalization and the Power of Peasants</u>. Halifax, Fernwood Publishing.
- DiDonato, G. (2009). "Roots of Change: Nebraska's New Agriculture." <u>Agricultural History</u>, 83 (1): 121-122.
- Dimitri, Carolyn (2005a) "The 20th Century Transformation of U.S. Agriculture and Farm Policy." <u>Economic information bulletin</u> 3.
- Dimitri, Carolyn, Anne Effland, & Neilson Conklin (2005b). The 20th Century Transformation of U.S. Agriculture and Farm Policy. <u>Economic information bulletin</u>, <u>www.ers.usda.gov</u>.
- Dixon, Deborah D. & Holly H. Hapke (2003). "Cultivating Discourse: The Social Construction of Agricultural Legislation." <u>Annals of the Association of American Geographers</u>, 93 (1): 142-164.

- Djurfeldt, Goran (1981). "What Hppened to the Agrarian Bourgeoisie and Rural Proletariat Under Monopoly Capitalism?" <u>Acta Sociologica</u>, 24 (3): 167-191.
- Dryzek, John S. (1996). <u>Democracy in Capitalist Times: Ideals, Limits, and Struggles</u>. New York and Oxford, Oxford University Press.
- Duffy, Michael (2011). The Current Situation on Farmland Values and Ownership. <u>Choices: The</u> <u>Magazine of Food, Farm & Resources</u>. Ames, Iowa, Agricultural & Applied Economics Association. 26.
- Eaton, Emily (2011). "Let the Market Decide? Canadian Farmers Fight the Logic of Market Choice in GM Wheat." <u>ACME</u>, 10 (1): 107-130.
- Edelman, Marc (2009). "Synergies and Tension between Rural Social Movements and Professional Researchers." Journal of Peasant Studies, 36 (1): 245-265.
- Ennew, Judith, Paul Hirst, & Keith Tribe (1977). "Peasantry as an Economic Category." Journal of Peasant Studies, 4 (4): 295-322.
- Environmental Work Group. (2011). "2011 Farm Subsidy Database." Retrieved March 11, 2012, from <u>http://www.ewg.org/</u>.
- Escobar, Arturo (1995). Encountering Development: The Making and Unmaking of the Third World. Princeton, Princeton University Press.
- Ess, Charles Ed. (2001). <u>Culture, Technology, Communication: Towards an Intercultural Global</u> <u>Village</u>. New Technologies, Old Culture: A Look at Women, Gender, and the Internet in Kuwait. Albany, State University of New York Press.
- Femia, Joseph V. (1981). <u>Gramsci's Political Thought: Hegemony, Consciousness, and</u> <u>Revolutionary Process</u>. Oxford, Clarendon Press.
- Fink, Deborah (1992). <u>Agrarian Women: Wives and Mothers in Rural Nebraska, 1880-1940</u>. Chapel Hill, Unoversity of North Carolina Press.
- Flora, Cornelia Butler & Jan L. Flora (2008). <u>Rural Communities: Legacy + Change</u>. Iowa State University, Westview Press.
- Flowerdew, Robin & David Martin (1997). <u>Methods in Human Geography</u>. New York, Prentice Hall.

- Foladori, Guillermo & Raul Delgado Wise (2009). Contemporary Capitalism: Development in an Era of Neoliberal Globalization. <u>CDS Handbook</u>. Veltmeyer, Henry. Zacatecas, University Autonoma de Zacatecas.
- Food and Agriculture Organization of the United Nations. (2008). "Gross Production Value (Constant 1999-2001 Million Slc) (Slc)." Retrieved 5-6-2011, 2011, from http://faostat.fao.org/site/613/DesktopDefault.aspx?PageID=613#ancor.
- Foster, John Bellamy (1999). "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology." <u>AJS</u>, 105 (2): 366-405.
- ---. (2010). "Why Ecological Revolution?" Monthly Review, (January): 1-18.
- Fox, Tom & Bill Vorley (2004). Concentration in Food Supply and Retail Chains. Team, Agriculture and Natural Resources. London, UK, UK Department for International Development.
- Francis, C. A. & H. C. Carter (2001). "Participatory Education for Sustainable Agriculture: Everyone a Teacher, Everyone a Learner." <u>Journal of Sustainable Agriculture</u>, 18 (1): 71-83.
- Francis, C. A. & P. Porter (2011a). "Ecology in Sustainable Agriculture Practices and Systems." <u>Critical Review of Plant Sciences</u>, 30: 64-73.
- Francis, C. A., N. Jordan, P.Porter, T.A. Berland, G. Lieblein, L. Salomonsson, N. Sriskandarajah, M. Wiedenhoeft, R. DeHaan, I. Braden, & V.Langer (2011b).
 "Innovative Education in Agroecology: Experiential Learning for a Sustainable Agriculture." <u>Critical Review of Plant Sciences</u>, 30: 226-237.
- Francis, C., G. Lieblein, S. Gliessman, T.A. Breland, N. Creamer, R. Harwood, L. Salomonsson, J. Helenius, D. Rickerl, R. Salvador, M. Wiendehoeft, S. Simmons, P. Allen, M. Altieri, J. Porter, C. Flora, & R. Poincelot. J. (2003). "Agroecology: The Ecology of Food Systems." <u>Sustainable Agriculture</u>, 22: 99-118.
- Friedland, William H. (1991). "The Transnationalization of Agriculture Production: Palimpsest of the Transnational State." <u>International Journal of Sociology of Agriculture and Food</u>, 1 (19): 48-58.
- ---. (2001). "Reprise on Commodity Systems Methodology." <u>International Journal of Sociology</u> of Agriculture and Food, 9 (1): 82-103.

- ---. (2003). Agrifood Globalization and Commodity Systems. <u>The Globalization of Agriculture</u> <u>and Food and</u>. Friedland, William H. Austin, Texas, Agriculture and Human Values Society.
- Friedmann, Harriet (1978). "World Market, State, and Family Farm: Social Bases of Household Production in the Era of Wage Labor." <u>Comparative Studies in Society and History</u>, 20 (4): 545-586.
- ---. (1980). "Household Production and the National Economy: Concepts for the Analysis of Agrarian Formations." Journal of Peasant Studies, 7 (2): 158-184.
- ---. (1993). "The Political Economy of Food: A Global Crisis." <u>New Left Review</u>, 197 (1): 29-57.
- Friedmann, Harriet & Philip McMichael (1989). "Agriculture and the State System: The Rise and Decline of National Agricultures, 1870 to the Present." <u>Rural Sociology</u>, 29 (2): 93-117.
- Funk, Patricia E. & Jon Bailey (2000). Trampled Dreams: The Neglected Economy of the Great Plains. Affairs, Center for Rural. Norfolk, NE, Center for Rural Affairs: 1-65.
- Galt, Ryan E. (2011). "Counting and Mapping Community Supported Agriculture (Csa) in the United States and California: Contributions from Critical Cartography/Gis." <u>ACME: An International E-Journal for Critical Geographies</u>, 10 (2): 131-162.
- Gardner, Bruce L. (2002). <u>American Agriculture in the Twentieth Century: How It Flourished</u> <u>and What It Cost</u>. Cambridge, Massachusetts, Harvard University Press.
- Gereffi, Gary (2001). "Shifting Governance Structures in Global Commodity Chains, with Special Reference to the Internet." <u>American Behavioral Scientist</u>, 44 (10): 1616-1637.
- ---. (2004). The Global Economy: Organization, Governance, and Development. <u>Handbook of Economic Sociology</u>. Smelser, Neil & Richard Swedberg, Princeton University Press: 182.
- ---. Ed. (2005). <u>The Handbook of Economic Sociology</u>. The Global Economy: Organization, Governance, and Development. Princeton, NJ, Princeton University Press and Russell Sage Foundation.
- Gibbon, Peter (2001). "Upgrading Primary Production: A Global Commodity Chain Approach." <u>World Development</u>, 29 (2): 345-363.

- ---. (2008). "An Analysis of Standards-Based Regulation in the EU Organic Sector, 1991–2007." Journal of Agrarian Change, 8 (4): 553-582.
- Gibson, R.H., S. Pearce, R.J. Morris, W.O.C. Symondson, & J. Memmott (2007). "Plant Diversity and Land Use under Organic and Conventional Agriculture: A Whole-Farm Approach." Journal of Applied Ecology, 44: 792-803.
- Gilbreth, Chris & Gerardo Otero (2001). "Democratization in Mexico: The Zapatista Uprising and Civil Society." <u>Latin American Perspectives</u>, 28 (7-29).
- Goetz, Stephan J. & David L. Debertin (1996). "Rural Population Decline in the 1980s: Impacts of Farm Structure and Federal Farm Programs." <u>American Journal of Agricultural</u> <u>Economics</u>, 78 (3): 517-529.
- Gold, Mary V. & Jane Potter Gates (2007). Tracing the Evolution of Organic/Sustainable Agriculture : A Selected and Annotated Bibliography. Library, National Agricultural. Beltsville, Md., United States Dept. of Agriculture.
- Gomiero, T., M.G. Paoletti, & D. Pimentel (2008). "Enegry and Environmental Issues in Organic and Conventional Agricuture." <u>Critical Review of Plant Science</u>, 27: 239-254.
- ---. (2011a). "Environmental Impact of Different Agriculture Managment Practices: Conventional Vs. Organic Agriculture." <u>Critical Review of Plant Science</u>, 30: 95-124.
- Gomiero, Tiziano, David Pimentel, & Maurizio G. Paoletti (2011b). "Is There a Need for a More Sustainable Agriculture." <u>Critical Review of Plant Sciences</u>, 30: 6-23.
- Gonzalez, Carmen G. (2004). "Trade Liberalization, Food Security, and the Environment: The Neoliberal Threat to Sustainable Rural Development." <u>TRANSNATIONAL LAW & CONTEMPORARY PROBLEMS</u>, 14 (419): 428-498.
- Goodman, David (1999). "Agro Food Studies in the 'Age of Ecology': Nature, Corporeality, Bio-Politics." <u>European Society for Rural Sociology</u>, 39 (1): 17-39.
- Goodman, David & Melanie DuPuis (2002). "Knowing Food and Growing Food: Beyond the Production-Consumption Debate in the Sociology of Agriculture." <u>Sociologia Ruralis</u>, 42 (1): 5-22.
- Gopalakrishnan, Gayathrigo, M. Cristinanegri, Michael Wang, May Wu, Seth W. Snyder, & Lorraine Lafreniere (2009). "Biofuels, Land, and Water: A Systems Approach to Sustainability." <u>Environmental Science Technology</u>, 43: 6094-6100.

- Gramsci, Antonio (1971). <u>Selections from the Prison Notebooks</u>. New York, International Publishers.
- ---. (1987). The Modern Prince & Other Writings. New York, International Publishers.
- Griesgraber, M. J. & B. G. Gunter Ed. (1996). <u>Development: New Paradigms and Principles for</u> <u>the 21st Century</u>. The New Development Paradigm: Organizing for Implementation. London, Pluto.
- Grove, Susan (2006). Same-Sex Marriage in Canada and the Theory of Political-Cultural Formation. <u>Sociology and Anthropology</u>. Vancouver, Simon Fraser University. M.A.: 139.
- Guthman, Julie (2002). "Commodified Meanings, Meaningful Commodities: Re-Thinking Production-Consuption Links through the Organic System of Provision." <u>Sociologia</u> <u>Ruralis,</u> 42 (4): 295-311.
- Harmon, Amy & Andrew Pollack (2012) "Battle Brewing Over Labeling of Genetically Modified Food." <u>The New York Times</u>.

Harvey, David (1982). The Limits to Capital. Chicago, University of Chicago Press.

- ---. (2007). "Neoliberalism as Creative Destruction." <u>The ANNALS of the American Academy</u> of Political and Social Science, 610 (21): 22-44.
- Heffernan, William D. (2007). Heffernan Testimony on Lb 1086. <u>Center for Rural Affairs</u>. Lincoln, Nebraska, Center for Rural Affairs: 3.
- Heffernan, William, Mary Hendrickson, & Robert Gronski (1999). Consolidation in the Food and Agriculture System, National Farmers Union.
- Henderson, Jason & Maria Akers (2008). "Will Rural Prosperity Prevail in 2008." <u>Economic</u> <u>Review</u>: 69-86.
- Hendrickson, Mary (2009). "Creating Alternatives: A Participant Observer's Reflections on the Emerging Local Food System in Kansas City." <u>Southern Rural Sociology</u>, 24 (2): 169-191.
- Hendrickson, Mary & William Heffernan (2007). Concentration of Agricultural Markets, National Farmers Union: 1-4.
- Heron, Tony (2002). "The US: Caribbean Apparel Connection and the Politics of 'NAFTA Parity'." <u>Third World Quarterly</u>, 23 (4): 753-767.

- Holmes, Todd (2010). "The Economic Roots of Reaganism: Corporate Conservatives, Political Economy, and the United Farm Workers Movement, 1965-1970." <u>The Western Historical</u> <u>Quarterly</u>, 41 (1): 55-80.
- Holt-Gimenez, Eric & Raj Patel (2009). <u>Food Rebellions! Crisis and the Hunger for Justice</u>. Cape Town, Pambazuka Press.
- Humphrey, John & Timothy Sturgeon (2005). "The Governance of Global Value Chains." <u>Review of International Political Economy</u>, 12 (1): 78-104.
- Hurt, Douglas R. (2002a). <u>American Agriculture : A Brief History</u>. West Lafayette, Ind., Purdue University Press.
- ---. (2002b). <u>Problems of Plenty : The American Farmer in the Twentieth Century</u>. Chicago, Ivan R. Dee.
- Ikerd, John (2001a). Reconnecting Consumers and Farmers in the Food System. <u>Reconnecting</u> <u>Consumers and Farmers</u>. Columbus, OH.
- ---. (2001b). Sustaining Rural Communities through Sustainable Agriculture. <u>Annual Meeting of</u> <u>the Southern Rural Sociology Association</u>. Fort Worth, Texas.
- ---. (2004). Twenty Years of Sustainable Agriculture. <u>Tenth Anniversary Celebration</u>. University of Vermont Center for Sustainable Agriculture.
- ---. (2005). Sustainable Agriculture: A North American Snapshot. <u>Agricultural Institute of</u> <u>Canada Annual Forum</u>. Quevec City, Quebec Canada.
- ---. (2007a). The Ecology of Sustainability. <u>Small Farms Are Real Farms: Sustaining People</u> <u>through Agriculture</u>, Acres USA, Inc.
- ---. (2007b). Sustainable Farming and Rural Community Development. <u>Small Farms Are Real</u> <u>Farms, Sustaining People through Agriculture</u>, University of Missouri.
- ---. (2010a). The New American Farm in a Sustainable Capitalist Economy. <u>Thermalito</u> <u>Community Meeting</u>. Oroville, CA.
- ---. (2010b). Reclaiming Rural America; Sustainable Community Development. <u>Town Hall</u> <u>Meeting on Local Sustainable Community Development</u>. Sioux City, IA, Catholic Diocese of Sioux City.

- ---. (2011a). Authentic Sustainability; Beyond Going Green. <u>Midwest Regional Collaborative for</u> <u>Sustainability Education, Authentic Sustainability: in Education, Society, and Everyday</u> <u>Life</u>. Ashland, WI.
- ---. (2011b). A Rural Revolution; a Time to Act against Cafo's. <u>When a Mega Dairy Comes In</u>. Rockford, IL, HOMES (Helping Others Maintain Environmental Standards).
- Ingram, Merrill (2007). "Biology and Beyond: The Science of 'Back to Nature' Farming in the United States." <u>Annals of the Association of American Geographers</u>, 97 (2): 298-312.
- Jackson-Smith, Douglas B. & Frederick H. Buttel (2003). "Social and Ecological Dimensions of the Alternative-Conventional Agricultural Paradigm Scale." <u>Rural Sociology</u>, 68 (4): 513-530.
- Jackson, Wes (1980). New Roots for Agriculture. Lincoln, University of Nebraska Press.
- ---. (1996). Matfield Green. <u>Rooted in the Land: Essays on Community and Place</u>. Vitek, William, & Wes Jackson. New Haven, Yale University Press.
- Jepson, Wendy (2005). "Spaces of Labor Activism, Mexican-American Women and the Farm Worker Movement in South Texas since 1966." <u>Antipode</u>: 679-702.
- John, DeWitt (1993). "Where Is Rural Policy Headed?" <u>Annals of the American Academy of</u> <u>Political and Social Science</u>, 529: 22-33.
- Johnson, Kirk (2012) "Small Farmers Creating New Business Model as Agriculture Goes Local." <u>The New York Times</u>.
- Johnson, Renée (2009). Climate Change: The Role of the U.S. Agriculture Sector, Congressional Research Service: 31.
- Johnston, Josee (2008). "The Citizen Consumer Hybrid: Ideological Tensions and the Case of Whole Foods Market." <u>Theory and Society</u>, 37 (3): 229-270.
- Johnston, Josee & Shyon Baumann (2009a). <u>Foodies: Democracy and Distinction in the Gourmet</u> <u>Foodscape</u>. New York, Routledge.
- Johnston, Josee, Andrew Biro, & Norah MacKendrick (2009b). "Lost in the Supermarket: The Corporate-Organic Foodscape and the Struggle for Food Democracy." <u>Antipode</u>, 41 (3): 509-532.
- Jordan, M., G. Boody, W. Broussard, J.D. Glover, D. Keeney, B.H. McCown, G. McIsaac, M. Muller, H. Murray, J. Neal, C. Pansing, R. E. Turner, K. Warner, & D. Wyse (2007).

"Sustainable Development of the Agricultural Bio-Economy." <u>Science</u>, 316 (5831): 1570-1571.

Kautsky, Karl (1988). The Agrarian Question. London, Zwan Publishers.

Kebede, AlemSeghed (2005). "Grassroots Organizations in the United States: A Gramscian Analysis." <u>Social Inquiry</u>, 75 (1): 81-108.

Kleeb, Jane (2012) "Update: TransCanada Loophole Bill, Take Action."

- Kloppenburg, Jack Ralph (2004). <u>First the Seed: The Political Economy of Plant Biotechnology</u>, <u>1492-2000</u>. Madison, The University of Wisconsin Press.
- Knutson, C. L., Haigh, T., Hayes, M. J., Widhalm, M., Nothwehr, J., Kleinschmidt, M., & Graf, L. (2011). "Farmer Perceptions of Sustainable Agriculture Practices and Drought Risk Reduction in Nebraska, USA." <u>Renewable Agriculture and Food Systems</u>, 26 (3): 255-266.
- Labao, Linda & Katherine Meyer (2001). "The Great Agricultural Transistion: Crisis, Change, and Social Consequences of Twentieth Century US Farming." <u>Annual Review of</u> <u>Sociology</u>, 27 (2001): 103-124.

Laclau, Ernesto (1977). Ideology and Politics in Marxist Theory. London, New Left Books.

- Lappe, Frances Moore, Joseph Collins, Peter Rosset, & Luis Esparza (1998). <u>World Hunger:</u> <u>Twelve Myths</u>.
- Lenin, V.I. (1908). <u>The Development of Capitalism in Russia</u>. Moscow, Institute of Marxism-Leninism.
- Leslie, Deborah & Suzanne Reimer (1999). "Spatializing Commodity Chains." <u>Progress in</u> <u>Human Geography</u>, 23 (3): 401-420.
- Letheby, Pete (2012) "Oink, Oink, Ouch: A Moral Issue Confronts Industrial Farmers." <u>Missoula</u> <u>Independent</u>.
- Levine, David P. (2001). "Political Economy and the Idea of Development." <u>Review of Political</u> <u>Economy</u>, 13 (4): 523-536.
- Lipietz, Alain (1992). <u>Towards a New Economic Order: Postfordism, Ecology and Democracy</u>. New York, Oxford University Press.

- Lyson, Thomas A. & Rick Welsh (2005). "Agriculture Industrialization, Anticorporate Farming Laws, and Rural Community Welfare." <u>Environment and Planning</u>, 37: 1479-1491.
- Ma, Yan, Liding Chen, Xinfeng Zhao, Haifeng Zheng, & Yihe Lu (2009). "What Motivates Farmers to Participate in Sustainable Agriculture? Evidence and Policy Implications." <u>International Journal of Sustainable Development & World Ecology</u>, 16 (6): 374-380.

Mabin, Clarence (2007). "I-300 Wont Be Reviewed by High Court." Lincoln Journal Star.

Maps of Net (2012). Nebraska Reference Map, Maps of Net.

Martínez-Torres, María Elena, & Peter M. Rosset (2010). "La Vía Campesina: The Birth and Evolution of a Transnational Social Movement." Journal of Peasant Studies, 37 (1): 307-322.

Marx, Karl (1974). Capital. London, Lawrence & Wishart.

McAdam, Doug (1988). Freedom Summer. New York, Oxford University Press.

- McMichael, Philip (2008). "Peasants Make Their Own History, but Not Just as They Please....." Journal of Agarian Change, 8 (2 and 3): 205-228.
- ---. (2009a). "Contemporary Contridictions of the Global Development Project: Geopolitics, Global Ecology and the 'Development Climate'." <u>Third World Quarterly</u>, 30 (1): 247-262.
- ---. (2009b). "A Food Regime Genealogy." Journal of Peasant Studies, 36 (1): 139-169.
- McMichael, Philip & Frederick H. Buttel (1990). "New Directions in the Political Economy of Agriculture." <u>Sociological Perspectives</u>, 33 (1): 89-109.
- McMichael, Philip & Mindi Schenider (2011). "Food Security Politics and the Millennium Development Goals." <u>Third World Quarterly</u>, 32 (1): 119-139.
- Meter, Ken (2010). Nebraska Farm & Food Economy. Pots, No More Empty. Minneapolis, Crossroads Resource Center.
- Meyer, Ron (2012). "Large Corporations Destroy Competitive Prices." <u>The Grand Island</u> <u>Independent</u>.

- Millstone, Erik & Patrick van Zwanenberg (2003). "Food & Agricultural Biotechnology Policy: How Much Autonomy Can Developing Countries Exercise?" <u>Development Policy</u> <u>Review</u>, 21 (5-6): 655-667.
- Mitchell, Don (2003). <u>The Right to the City: Social Justice and the Fight for Public Space</u>. New York City, The Guildford Press.
- Monk, Andrew (2011). "Sustianable and Resilient Social Structures for Change: The Organic Movement." <u>Social Alternatives</u>, 30 (1): 34-37.
- Moreira, Manuel Belo (2004). "Agriculture and Food in the Globalization Debate." <u>International</u> Journal of Sociology of Agriculture and Food, 12 (4): 17-28.

Morgan, Dan (1979). Merchants of Grain, Viking Press.

- Muller, Adrian (2009). "Sustainable Agriculture and the Production of Biomass for Energy Use." <u>Climate Change</u>, 94: 319-331.
- Mundlak, Yair (2005). "Economic Growth: Lessons from Two Centuries of American Agriculture." Journal of Economic Literature, 43 (4): 989-1024.
- Munoz, Jose A. (2006). "International Oppertunities Ans Domestic Portest: Zapatistas, Mexico, and the New World Economy." <u>Social Movement Studies</u>, 5 (3): 251-274.
- Nadvi, Khalid (2008). "Global Standarrds, Golbal Goverance and the Organization of Global Value Chains." Journal of Economic Geography: 1-21.

NebAlt#1 (2011). Interview. Grant, NE.

---. (2012). Phone Interview. Omaha, NE.

NebAlt#2 (2011). Interview. Omaha, NE.

NebAlt#3 (2011). Interview. Omaha, NE.

- NebAlt#4 (2011). Interview. Western Nebraska.
- NebAlt#5 (2011). Interview. Western Nebraska.

NebAlt#6 (2011). Interview. Western Nebraska.

NebAlt#7 (2011). Interview. Western Nebraska.

NebAlt#8 (2012). Interview. Omaha, NE.

NebAlt#9 (2011). Interview. Central Nebraska.

NebAlt#10 (2011). Interview. Central Nebraska.

NebAlt#11 (2011). Interview. Central Nebraska.

NebAlt#12 (2012). Interview. Eastern Nebraska.

NebAlt#13 (2012). Interview. Eastern Nebraska.

NebAlt#14 (2011). Interview. Wahoo, NE.

---. (2012). Interview. Eastern Nebraska.

NebAlt#15 (2012). Interview. Lincoln, NE.

NebAlt#16 (2011). Interview. Omaha, NE.

NebAlt#17 (2012). Interview. Lincoln, NE.

NebAlt#18 (2012). Interview. Omaha, NE.

NebAlt#19 (2012). Phone Interview. Omaha, NE.

NebAlt#20 (2012). Interview. Lincoln, NE.

NebAlt#21 (2011). Interview. Fullerton, NE.

---. (2012). Phone Interview. Omaha, NE.

NebAlt#22 (2012). Interview. Lincoln, NE.

NebAlt#23 (2012). Interview. Lincoln, NE.

NebAlt#24 (2012). Interview. Lincoln, NE.

NebAlt#25 (2012). Interview. Lincoln, NE.

- NebAlt#26 (2012). Interview. Nebraska City, NE.
- NebAlt#27 (2012). Phone Interview. Omaha, NE.
- NebAlt#28 (2012). Interview. Lincoln, NE.
- NebAlt#29 (2012). Interview. Nebraska City, NE.
- NebAlt#30 (2012). Interview. Nebraska City, NE.
- NebAlt#31 (2012). Interview. Nebraska City, NE.
- NebAlt#32 (2012). Interview. Eastern Nebraska.
- NebAlt#33 (2012). Interview. Omaha, NE.
- NebAlt#34 (2012). Interview. Nebraska City, NE.
- NebAlt#35 (2012). Interview. Eastern Nebraska.
- NebAlt#36 (2012). Phone Interview. Omaha, NE.
- NebAlt#37 (2012). Phone Interview. Omaha, NE.
- Nebraska Corn Board. (2012). "Ethanol." Retrieved 11 March 2012, 2012, from <u>http://www.nebraskacorn.org</u>.
- Nebraska Food Cooperative. (2011). Retrieved June 17, 2011, from <u>http://www.nebraskafood.org/</u>.
- ---. (2012). "Nebraska Food Cooperative." Retrieved 4/24/2012, 2012, from <u>http://www.nebraskafood.org/</u>.
- Nebraska Sustainable Agriculture Society. (2008). "Welcome to NSAS." Retrieved October 14, 2011, from <u>http://www.nebsusag.org/</u>.
- Newman, Susan A. (2009). "Financialization and Changes in the Social Relations Along Commodity Chains: The Case of Coffee." <u>Review of Radical Political Economics</u>, 41 (539): 539-559.

- Nixson, Frederick (2006). "Rethinking the Political Economy of Development: Back to Basics and Beyond." Journal of International Development, 18: 967-981.
- O'Hanlon, Kevin (2011) "Governor Signs Two Oil Popeline Bills into Law." <u>Lincoln Journal</u> <u>Star</u>, 1-2.
- O'Malley, Anthony Holland (2009a). Back to Basics. <u>Tools for Change: A Handbook for Critical</u> <u>Development Studies</u>. Veltmeyer, Henry. Zacatecas, Zac., Mexico, Universidad Autonoma de Zacatecas and CDS Network: 23-30.
- ---. (2009b). Tools for Change: A Handbook for Critical Development Studies. <u>Critical Social</u> <u>Analysis and Development</u>. Veltmeyer, Henry. Zacatecas, Zac., Mexico, Universidad Autonoma de Zacatecas and CDS Network: 251-265.
- ---. Ed. (2009c). <u>Tools for Change: A Handbook for Critical Development Studies</u>. Critical Social Analysis and Development. Zacatecas, Zac., Mexico, Universidad Autonoma de Zacatecas and CDS Network.

Otero, Gerardo (1996). Neoliberal Reform and Politics in Mexico, Westview Publisher.

- ---. (1999). <u>Farewell to the Peasantry?</u>; <u>Political Class Formation in Rural Mexico</u>. Boulder, Westview Press.
- ---. (2004). "Global Economy, Local Politics: Indigenous Struggles, Civil Society and Democracy." <u>Canadian Journal of Political Science</u>, 37 (2): 325-346.
- ---. Ed. (2008). Food for the Few: Neoliberal Globalism and Biotechnology in Latin America. Neoliberal Globalism and the Biotechnology Revolution: Economic and Historical Context. Austin, University of Texas Press.
- ---. (2011a). "Neoliberal Globalization, NAFTA, and Migration: Mexico's Loss of Food and Labor Sovereignty." Journal of Poverty, 15: 384-402.
- ---. (2011b). "Transnational Globalism or Internationalist Nationalism? : Neoliberal Capitalism and Beyond." <u>Latin American Perspectives</u>, 38 (109): 109-116.
- ---. (2012). "The Neoliberal Food Regime in Latin America: State, Agribusiness Transnational Corporations and Biotechnology." <u>Forthcoming in Canadian Journal of Development</u> <u>Studies</u>: 32.
- Otero, Gerardo & Heidi Jugenitz (2003). "Challenging National Borders from Within: The Political-Class Formation of Indigenous Peasants in Latin America." <u>Canadian Review of</u> <u>Sociology and Anthropology</u>, 40 (5): 503-524.

- Page, Brian (1996). "Across the Great Divide: Agriculture and Industrial Geography." <u>Economic</u> <u>Geography</u>, 72 (4): 376-397.
- Parpart, Jane L. & Henry Veltmeyer (2003). "The Development Project in Theory: A Review of Its Shifting Dynamics." <u>Canadian Journal of Development Studies</u>, 25 (1): 2-26.
- Partridge, Damani James (2011). "Activist Capitalism and Supply-Chain Citizenship; Producing Ethical and Ready-to-Wear Clothes." <u>Current Anthropology</u>, 52 (3): 97-111.
- Patzek, Tad W. (2008). "Thermodynamics of Agricultural Sustainability: The Case of US Maize Agriculture." <u>Critical Review of Plant Sciences</u>, 27: 272-293.
- Pearson, Craig J. (2007). "Regenertive, Semiclosed Systems: A Priority for Twenty- First Century Agriculture." <u>BioScience</u>, 57 (5): 409-418.
- Pechlaner, Gabriela & Gerardo Otero (2008). "The Third Food Regime: Neoliberal Globalism and Agriculture Biotechnology in North America." <u>Rural Sociology</u>, 48 (4): 351-371.
- ---. (2010). "The Neoliberal Food Regime: Neoregulation and the New Division of Labor in North America." <u>Rural Sociology</u>: 1-30.
- Petras, James (2009). Globalization, Imperialism and Development. <u>Tools for Change: A</u> <u>Handbook for Critical Development Studies</u>. Veltmeyer, Henry. Zacatecas, Zac., Mexico, Universidad Autonoma de Zacatecas and CDS Network: 113-120.
- Petras, James & Henry Veltmeyer (2010). Neoliberalism and the Dynamics of Capitalist Development in Latin America. <u>Globalization in the 21st Century</u>. Berberoglu, Berch. London, Palgrave Macmillan.
- Pimentel, David (2011). "Food for Thought: A Review of the Role of Evegry in Current and Evolving Agriculture." <u>Critical Reviews in Plant Science</u>, 30: 30-35.
- Piven, Frances F. (2010). "Reflections on Scholarship and Activism." <u>Political Science and</u> <u>Sociology</u>, 42 (4): 806-810.
- Piven, Frances F. & Richard A. Cloward (2000). "Power Repertoires and Globalization." <u>Politics</u> <u>& Society</u>, 28 (413): 413-430.
- Plahe, Jagjit (2005). The Global Commodity Chain (GCC) Approach and the Organisational Transformation of Agriculture: A Look into the Increasing Power of Retailers and Branded Merchandisers. <u>Department Of Management Working Papers Series</u>, Monash University; Business and Economics: 1-11.

- Ponte, Stefano & Peter Gibbon (2005). "Quality Standards, Conventions and the Governance of Global Value Chains." <u>Economy and Society</u>, 34 (1): 1-31.
- Pritchard, Bill (2005a). "Implementing and Maintaining Neoliberal Agriculture in Australia. Part I: Constructing Neoliberalism as a Vision for Agricultural Policy." <u>International Journal</u> <u>of the Sociology of Agriculture and Food</u>, 13 (1): 1-12.
- ---. (2005b). "Implementing and Maintaining Neoliberal Agriculture in Australia. Part II: Strategies for Securing Neoliberlism." <u>International Journal of the Sociology of</u> <u>Agriculture and Food</u>, 13 (2): 1-14.
- Ralston, Don & Marty Strange (1998). The Center for Rural Affairs in the First 20 Years: A Short Memoir, Mostly More of Less True. Lyons, NE, Center for Rural Affairs: 1-20.
- Raynolds, Laura T. (2004). "The Globalization of Organic Agro-Food Networks." <u>World</u> <u>Development</u>, 32 (5): 725-743.
- Rembert, Julia Kleinschmit (2000). Building Rural Women's Leadership in Sustainable Agriculture. Society, Nebraska Sustainable Agriculture. Hartington, NE, W.K. Kellogg Foundation and North Central Region SARE: 20.
- Rosset, Peter (2005). "Transgenic Crops to Address Third World Hunger? A Critical Analysis." <u>Bulletin of Science, Technology & Society</u>, 25 (4): 306-313.
- ---. (2008). "Food Sovereignty and the Contemporary Food Crisis." <u>Society for International</u> <u>Development</u>, 51 (4): 460-463.
- ---. (2009a). "Fixing Our Global Food System." Monthly Review, (July-August): 114-128.
- ---. (2009b). "Agrofuels, Food Sovereignty, and the Contemporary Food Crisis." <u>Bulletin of</u> <u>Science, Technology & Society</u>, 29 (3): 189-193.
- Rosset, Peter & Miguel Altieri (1997). "Agroecology Versus Input Substitution: A Fundamental Contradiction of Sustainable Agriculture." <u>Society and Natural Resources</u>, 10 (3): 283–295.
- Rupert, Mark (2005). "Reading Gramsci in an Era of Globalising Capitalism." <u>Critical Review of</u> <u>International Social and Political Philosophy</u>, 8 (4): 483-497.
- Salt, Sandra & Gerardo Otero (2011). Class, Identity and Empowerment: The Political-Cultural Formation of Bolivia's MAS. Burnaby, British Columbia, Simon Fraser University: 1-50.

- Salter, Colin (2011). "Going Online for Social Change: Techniques, Barriers and Possibilities for Community Groups." <u>Social Alternatives</u>, 30 (1): 19-24.
- Sassen, Saskia (2010). "Global Inter-City Networks and Commodity Chains: Any Intersections?" <u>Global Networks</u>, 10 (1): 150-163.
- Schneider, M. L. & C. A., Francis (2006). "Ethics of Land Use in Nebraska: Farmer and Consumer Opinions in Washington County." <u>Journal of Sustainable Agriculture</u>, 28 (4): 81-104.
- Schneider, Stephen (2008). "Good, Clean, Fair: The Rhetoric of the Slow Food Movement." <u>College English</u>, 70 (4): 384-402.
- Senauer, Benjamin (2008). "Food Market Effects of a Global Resource Shift toward Bioenegry." <u>American Journal of Agricultural Economics</u>, 90 (5): 1226-1232.
- Slama, Kay (2004). "Rural Culture Is a Diversity Issue." Minnesota Psychologist, (Jan): 9-13.
- Slow Food USA. (2011). "What Is Slow Food." Retrieved June 17, 2011, from <u>http://www.slowfoodusa.org/index.php/slow_food/</u>.
- Snow, A. A., D. A. Andow, P. Gepts, E. M. Hallerman, A. Power, J. M. Tiedje, & L. L.Wolfenbarger (2005). "Genetically Engineered Organisms and the Environment: Current Status and Recommendations." <u>Ecological Applications</u>, 15 (2): 377-404.
- Nebraska Sustainable Agriculture Society (2008). "Welcome to NSAS." Retrieved October 14, 2011, 2011, from <u>http://www.nebsusag.org/</u>.
- Stahl, Jeremy (2012). "Is the "Frankenfood" Debate over Gmo's in Europe Finally Ending?" <u>Slate.com</u>.
- Stahler-Sholk, Richard (2007). "Resisting Neoliberal Homogenization: The Zapatista Autonomy Movement." <u>Latin American Perspectives</u>, 34 (2): 48-63.
- Stanton, B.F., Ed. (1993). <u>Size, Structure, and the Changing Face of American Agriculture</u>. Changes in Farm Size and Structure in American Agriculture in the Twentieth Century. Boulder, Westview Press.
- Starosta, Guido (2010). "Global Commodity Chains and the Marxian Law of Value." <u>Antipode</u>, 42 (2): 433-465.
- Storey, Shannon (2001). "Neoliberal Trade Policies in Agriculture and the Destruction of Global Food Security." <u>Canadian Woman Studies</u>, 21 (3): 190-195.

Sturgeon, Timothy J. (2008). Frontiers of Commodity Chain Research. <u>From Commodity Chains</u> to Value Chains: Interdisciplinary Theory Building in an Age of Globalization. Bair, Jennifer, Stanford University Press.

theclipartwizard.com (2010). Nebraska-Map, theclipartwizard.com.

Tikhonovich, I.A. & N.A. Provorov (2011). "Microbiology Is the Basis of Sustainable Agriculture: An Opinion." <u>Annals of Applied Biology</u>, 159 (2): 155-168.

Tilly, Charles & Sidney Tarrow (2007). Contentious Politics. Boulder, Paradigm Publishers.

- Tyson, Timothy B. (1999). <u>Robert F. Williams and the Roots of Black Power</u>. Chapel Hill & London, The University of North Carolina Press.
- Unger, David C. (2012). <u>The Emergency State: America's Pursuit of Absolute Security at All</u> <u>Costs</u>. New York, Penguin Press.
- United States Department of Agriculture (1978). Agriculture Census 1978. National Agricultural Statistics Service.
- ---. (1982). Agriculture Census 1982. National Agricutural Statistics Service.
- ---. (1987). Agriculture Census 1987. National Agricutural Statistics Service.
- ---. (1992). Agriculture Census 1992. National Agricutural Statistics Service.
- ---. (1997). Agriculture Census 1997. National Agricutural Statistics Service.
- ---. (2002). Agriculture Census 2002. National Agricutural Statistics Service.
- ---. (2007). Agriculture Census 2007. National Agricutural Statistics Service.
- ---. (2010). Nebraska Agriculture Fact Card 2007. Nebraska Department of Agriculture. Nebraska.
- ---. (2011). Nebraska Ag Rank and Ag Business Facts. National Agricultural Statistics Service. Lincoln, USDA: 4.
- ---. (2012a). "Census of Agriculture Historical Archive." Retrieved February 17, 2012, from http://agcensus.mannlib.cornell.edu/AgCensus/homepage.do.

- ---. (2012b). Nebraska Agriculture Fact Card 2012. <u>Nebraska</u>. Nebraska Department Of Agriculture.
- ---. (2012c). Nebraska State Fact Sheet. <u>Fact Sheet</u>. Economic Research Service.
- ---. (2012d). "State Fact Sheets: Nebraska." Retrieved Feburary 17, 2012, from <u>http://www.ers.usda.gov/StateFacts/ne.HTM</u>.
- University of Nebraska-Lincoln (2011). "UNL Food: Buy Fresh Buy Local Nebraska." Retrieved 4/24/2012, 2012, from <u>http://food.unl.edu/web/localfoods/home</u>.
- Vandermeer, John (1995). "The Ecological Basis of Alternative Agriculture." <u>Annual Review of</u> <u>Ecological Systems</u>, 26 (1): 201-224.
- Vargas-Cetina, Gabriela (2011). "Corporations, Cooperatives, and the State: Examples from Italy." <u>Chicago Journals</u>, 52 (3): 127-136.
- Veltmeyer, Henry (2008). The World Bank on Agriculture for Development: A Failure of Imagination or the Power of Ideology. <u>CEDLA seminar-Rual Latin America:</u> <u>Contemporary Issues and Debates</u>. University of Amsterdam.
- Wallerstein, Immanuel (2008) "Protection Networks and Commodity Chains in the Capitalist World-Economy." <u>Word Press</u>.
- Weber, Max, Ed. (1978). Economy and Society, The University of North Carolina Press.
- White, Fiona (2010). "Deepening Democracy: A Farm Workers' Movement in the Western Cape." Journal of Southern African Studies, 36 (3): 673-691.
- Whitmeyer, Joseph M. & Rosemary L. Hopcroft (1996). "Community, Capitalism, and Rebellion in Chiapas." <u>Sociological Perspectives</u>, 39 (4): 517-538.
- Wilber, Charles Ed. (1988). <u>Political Economy of Development and Underdevelopment</u>. Paradigms of Economic Development and Beyond.
- Wittman, Hannah (2010). "Reworking the Metabolic Rift: La Via Campesina, Agrarian Citizenship, and Food Sovereignty." Journal of Peasant Studies, 36 (44): 805-826.
- Wood, Richard E. (2008). Survival of Rural America. Lawernce KS, University of Kansas Press.
- Wright, Erik Olin (2002). "The Shadow of Exploitation in Weber's Class Analysis." <u>American</u> <u>Sociological Review</u>, 67 (6): 832-853.

Yashar, Deborah J. (2007). "Resistance and Identity Politics in an Age of Globalization." <u>Annals</u> of the American Academy of Political and Social Science, 610: 160-181.