

The Pennsylvania State University

The Graduate School

Department of Agricultural Economics, Sociology, and Education

**ISSUES, RESOURCES, STRATEGIES: A FIELD-LEVEL ANALYSIS OF  
NATIONAL AGRIFOOD ORGANIZATIONS**

A Dissertation in

Rural Sociology and Human Dimensions of Natural Resources and the Environment

by

John T. Eshleman

© 2016 John T. Eshleman

Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of

Doctor of Philosophy

May 2016

The dissertation of John T. Eshleman was reviewed and approved\* by the following:

C. Clare Hinrichs  
Professor of Rural Sociology  
Director of Graduate Studies for Rural Sociology  
Dissertation Adviser  
Chair of Committee

Kathryn Brasier  
Associate Professor of Rural Sociology

Leland Glenna  
Associate Professor of Rural Sociology and Science, Technology, and Society

John D. McCarthy  
Distinguished Professor of Sociology

Carolyn Sachs  
Professor of Rural Sociology and Women's Studies

\*Signatures are on file in the Graduate School.

## ABSTRACT

Agrifood scholars have described current Alternative Agrifood Movements (AAMs) as convergent efforts to challenge the status quo agrifood system that are nonetheless characterized by diverse foci which potentially limit their prospects to form a cohesive challenge. Organizations play a key role in mobilization processes, but a systematic empirical examination of the organizations that comprise AAMs and the specific ways they converge and diverge across many AAMs is lacking. Clarifying patterns of convergence and divergence in the AAM organizational field is a necessary step to understanding the mobilization potential of these movements. This research investigated how patterns of issue selection among a sample of U.S. national agrifood organizations (N=690) manifested convergence and diversity in an agrifood field that included both AAM organizations and their potential opponents. The research applied cluster analysis techniques to categorize the organizational field by the combination of issues an organization selected—or issue orientation—to demonstrate the diverse organizational perspectives on agrifood issues. These clusters corresponded to the mesomobilization potential of organizations with similar issue orientations, and comparison tests of resource capacity and strategy measures demonstrated variation across clusters. Negative binomial regression analyses modeled issue orientation as a predictor of a social movement outcome—gaining acceptance—that was operationalized as providing testimony on agrifood topics at Congressional hearings. Results showed that national agrifood organizations broadly fit into clusters of either Status Quo, AAM, or diet-related health/food security issue orientations. At a more fine-grain level, a second cluster solution demonstrated that AAMs and diet-related health/food security clusters

were comprised of five distinct sub-clusters that revealed further patterns of issue diversity in the field, corresponding to varied resource levels and strategic approaches that characterized the mesomobilization potential of each cluster. Although in bivariate tests, Status Quo agrifood organizations were more likely than all other clusters to provide Congressional testimony in both cluster solutions, when controlling for resources and strategies, environmentally-focused AAM organizations were similar to Status Quo organizations in being significantly more likely than other sub-clusters to gain acceptance through Congressional hearings. This research developed a unique inventory of national agrifood organizations across a range of issues and demonstrated complex patterns of convergence and divergence among national-level agrifood organizations that can inform practitioner knowledge about their potential to work across diverse issues and gain access to political leaders.

# Table of Contents

<b>List of Figures</b>	<b>ix</b>
<b>List of Tables</b>	<b>x</b>
<b>Acknowledgements</b>	<b>xii</b>
<b>1 Introduction</b>	<b>1</b>
<i>Convergence and Diversity Among Alternative Agrifood Movements</i>	<i>1</i>
<i>A Social Movements Framework</i>	<i>6</i>
<b>2 Literature Review</b>	<b>11</b>
<i>Defining Alternative Agrifood Movements</i>	<i>11</i>
<i>The Status Quo Agrifood System</i>	<i>14</i>
Ecological Critiques	16
Food Access Critiques	18
Nutrition and Health Critiques	19
Farm Viability Critiques	20
Social Justice Critiques	21
<i>Alternative Agrifood Movements in Response</i>	<i>23</i>
Sustainable and Organic Agriculture Movement(s)	23
Local Food Movement	26
Fair Trade Movement	28
Anti-CAFO Movement	30
Anti-GMO Movement	32
Community Food Security Movement	33
Healthy Food Advocacy	35
<i>Alternative Agrifood Movements: Issue Diversity</i>	<i>37</i>
<i>From Movements to Organizations</i>	<i>43</i>
Alternative Agrifood Organization: National Level	43
Status Quo Agrifood Organizations	46
<i>Social Movements and Convergence and Divergence in AAMs: Theory and Framework</i>	<i>47</i>
Collective Action Frames	48
Organizations and Organizational Fields	50
Issue Orientation	52
Mesomobilization Potential	55
Research Question 1	57
Resources and Strategies	57
Research Question 2	60
Outcomes	61
Research Question 3	61
<i>Conclusion</i>	<i>62</i>

<b>3</b>	<b>Research Methods</b>	<b>63</b>
	<i>Unit of Analysis and Sample Population: National Agrifood Organizations</i>	64
	<i>Issue Statements and Coding</i>	70
	Issue Statements	73
	<i>Cluster Analysis of Organizations</i>	78
	<i>Cluster Comparisons of Resource and Strategy Measures</i>	82
	Resource Variables	83
	Strategy Variables	86
	Tactics	86
	Arenas	87
	Membership Structure	88
	Adherents	88
	<i>Regression Analysis: Testimony at Congressional Hearings</i>	90
	Sample	91
	Dependent Variable: Number of Hearings	91
	Independent Variable: Agrifood Issue Orientation	93
	Control Variables	94
	Data Analysis	95
	Missing Data	96
	<i>Data Quality</i>	97
	<i>Conclusion</i>	98
<b>4</b>	<b>Cluster Analysis of National Agrifood Organizations</b>	<b>100</b>
	<i>Hierarchical Cluster Analysis of Agrifood Organizations Based on Issue Orientation</i>	101
	Three-Cluster Solution	105
	Status Quo Agrifood	108
	Alternative Agrifood	109
	Nutrition and Food Access	109
	Six-Cluster Solution	112
	Anti-Industrial Agri-Technology	112
	Environmental Agrifood	117
	Broad-Spectrum Alternative Agrifood	118
	Diet-Related and Community Food Security	119
	Food Access	120
	<i>Discussion</i>	122
	Convergence and Divergence: Issue Orientation	123
	Frame Bridging Issues	127
	Federal Entitlement Program Support	128
	Community Food Security	130
	Local Food Systems	131
	Food and Farmworker Support	132

<i>Conclusion</i>	133
<b>5 Cluster Comparisons of Resources and Strategy Variables: Mesomobilization Potential in the Organizational Field</b>	<b>135</b>
<i>Descriptive Statistics</i>	136
<i>Resource Capacity Comparisons Across Three Agrifood Clusters</i>	141
<i>Resource Capacity Comparisons Across Six Agrifood Clusters</i>	145
<i>Organizational Strategy Comparisons Across Three Agrifood Clusters</i>	152
Tactics	154
Arena	155
Membership Structure	156
Adherents	157
<i>Organizational Strategy Across Six Agrifood Clusters</i>	158
Tactics	160
Arena	161
Membership Structure	162
Adherents	163
<i>Discussion</i>	164
Agrifood Cluster Profiles	165
Mesomobilization Potential	171
<i>Conclusion</i>	174
<b>6 Acceptance: Field-Level Analysis of Congressional Hearings Participation</b>	<b>176</b>
<i>Descriptive Statistics</i>	177
<i>Regression Analysis: Three Cluster Solution and Testimony at Congressional Hearings</i>	180
Issue Orientation	180
Resources	183
Strategy	185
<i>Regression Analysis: Six Cluster Solution and Testimony at Congressional Hearings</i>	189
Issue Orientation	189
<i>Conclusion</i>	194
<b>7 Discussion and Conclusions</b>	<b>196</b>
<i>Main Findings</i>	196
Bounding the National Agrifood Organizational Field: Convergence in Diversity	196
Mesomobilization Potential	199
Acceptance and National Agrifood Organizations	201
Social Movement Spillover	203
<i>Limitations</i>	204
<i>Future Research</i>	206

<i>Practical Implications: Concluding Remarks</i>	208
<b>References</b>	<b>209</b>
<b>Appendix: Sample Population of National Agrifood Organizations, Organized by Six-Cluster Solution (N=690)</b>	<b>233</b>



## List of Figures

Figure 4-1: Hierarchical Clusters of National Level Agrifood Organizations, N=690 ..	104
Figure 4-2: Issue Statements of Nat'l Agrifood Organizations for Three-Cluster Hierarchical Solution, Sorted by Overall Issue Frequency.....	107
Figure 4-3: Issue Statements of Nat'l Agrifood Organizations for Six-Cluster Hierarchical Solution, Sorted by Overall Issue Frequency .....	116

## List of Tables

Table 4-1: Frequency and Percent of Total Number of National Agrifood Organizations Coded for Each Issue Statement, N=690 .....	102
Table 4-2: Differences in Agglomeration Coefficients for Hierarchical Cluster Analysis of National Agrifood Organizations .....	103
Table 4-3: Issue Statements of Nat'l Agrifood Organizations for Three-Cluster Hierarchical Solution, Frequencies and Within-Cluster Proportions, Sorted by Overall Issue Frequency .....	106
Table 4-4: Issue Statements of Nat'l Agrifood Organizations for Six-Cluster Hierarchical Solution, Frequencies and Within-Cluster Proportions, Sorted by Overall Issue Frequency .....	114
Table 4-5: Issue Statements of Top Ten Status Quo Issues: Frequency and Within-Cluster Proportion of Nutrition and Food Access Organizations that Support Federal Food Entitlement Programs, N=179 .....	129
Table 5-1: Descriptive Statistics of Resource and Strategy Variables, N=690 Agrifood Organizations .....	138
Table 5-2: Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Three Cluster Solution.....	143
Table 5-3: Significant Pairwise Comparisons for Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Three Cluster Solution.....	144
Table 5-4: Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Six Cluster Solution.....	147
Table 5-5: Significant Pairwise Comparisons for Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Six Cluster Solution .....	150
Table 5-6: Proportions and Chi-Square Comparisons for Strategy Variables, Three Cluster Solution .....	153
Table 5-7: Proportions and Chi-Square Comparisons for Strategy Variables, Six Cluster Solution .....	159
Table 6-1: Descriptive Statistics and Proportions, N=576 .....	178

Table 6-2: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Three Cluster Solution, N=576 (Status Quo Cluster as Reference).....	181
Table 6-3: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Six Cluster Solution, N=576 (Status Quo Cluster as Reference).....	191
Table 6-4: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Six Cluster Solution, N=576 (Environmental Agrifood as Reference).....	193

## **Acknowledgements**

Many thanks are due to all those who have supported me both professionally and personally through the completion of this dissertation. I am grateful for resources provided through a Penn State College of Agricultural Sciences Competitive Dissertation Grant Award and a Rural Sociological Society Dissertation Research Award that both supported this research. My gratitude also goes to a long list of friends, family, colleagues, faculty, and staff in the Rural Sociology program at The Pennsylvania State University far too numerous to individually name here. More specifically, I am grateful to members of my doctoral committee for their insightful questions and critiques throughout the completion of this dissertation: Kathy Brasier, Leland Glenna, John McCarthy, and Carolyn Sachs. In addition, two others merit individual acknowledgment for their significant contributions to this accomplishment, without whom I never would have succeeded.

My academic achievements would not have been possible without Dr. C. Clare Hinrichs, whose advisement on this project and throughout graduate school has had a profound impact on my career. She has always blended the right balance of support and challenge, and my work is better for it.

My wife Allison has been by my side throughout, and I do not even know how to begin to express my gratitude. She has seen the best and worst of me and this dissertation, never wavering in unending patience, love, and support.

# 1 Introduction

Alongside recent public and political interest in food and agriculture issues, there is evidence of diverse and growing organized social movement activity related to agriculture and food (hereafter, *agrifood*). Most scholarship on agrifood movements to date has framed them as “alternatives” to a problematic global food system. In this research, I define alternative agrifood movements (AAMs) as collections of individuals and groups having a wide range of sustenance and sustainability concerns and seeking to reform the agrifood system to become more environmentally healthful, economically viable, and socially equitable. This definition points to a group of agrifood change efforts that are broadly related but diverse in their specific goals and issue arenas, described by some scholars as a “convergence in diversity” (Amin 2011: xvi, see also Constance et al. 2014b).

## **Convergence and Diversity Among Alternative Agrifood Movements**

Convergence and diversity together refer to the extent which AAMs, despite their different goals and issue areas, develop shared rationales and strategies to counter the negative externalities of the status quo food system, referenced elsewhere as the “conventional industrialized agro-food complex” (Maye et al. 2007: 1) or more simply the “conventional agrifood system” (Friedland 2008: 197) or “industrial” food system (Gottlieb and Joshi 2010; Friedmann 2005). Patterns of convergence are particularly important to understanding the potential for AAMs to precipitate transformative social and political change within the food system (Constance et al. 2014a), as widespread mobilization across shared interests may be necessary to build consensus in pursuit of

social and institutional change (Buttel 1997; Levkoe and Wakefield 2014). However, diverse approaches to agrifood change may also have benefits such as opening up new opportunities for resistance and attracting new allies (Levkoe and Wakefield 2014), thus suggesting a complex relationship between convergence and diversity. This research builds from the premise that AAM emergence and mobilization is a response to perceived threats posed by the status quo agrifood system (Hinrichs and Eshleman 2014; Constance et al. 2014a), suggesting a basic level of convergence that ties AAMs together. How different AAMs respond to the status quo agrifood system, or “what needs to be done” (Constance et al. 2014a: 30), is a source of diversity among AAMs. From this starting place, empirically assessing more specifically how AAMs converge across a diversity of agrifood issues is an important step to addressing the prospects of AAMs to influence the agrifood system.

Systematic empirical analysis on the extent of convergence and diversity among AAMs remains underdeveloped. This research seeks to address this gap in the literature with particular attention to *issue* convergence and diversity. Although AAMs (and social movements generally) will vary on several fronts, without shared issues as a focal point, collective mobilization is not possible. AAMs exhibit much issue diversity as a collection of many “individuated” movements that address a wide range of issues including sustainable agriculture, organic agriculture, local food systems, genetically modified organisms, concentrated animal feeding operations (CAFOs), and community food security among others (Friedland 2008:197). Although agrifood scholars have described specific movements within the AAMs based on issue-focus, some have effectively assumed large-scale convergence through the “aggregation of efforts to

reshape the conventional agrifood system” (Wright and Middendorf 2008: 3, see also Friedmann 2005; Raynolds 2000; Maye et al. 2007). As a result, much scholarship on AAM diversity has been explored through case studies of individual movements, (e.g., Wright and Middendorf 2008; Maye et al. 2007; Obach 2015), but systematic empirical examination of issue selection *across* a fuller population of AAMs has not taken place. As opposed to presumptively segregating AAMs into specific movements, this research analyzes issue selection among all known national-level agrifood organizations in the U.S. to better understand patterns of issue convergence and diversity. An overlooked challenge in the AAM literature is how scholars make decisions about which movements and which organizations constitute AAMs, and this research proceeds by categorizing all known national-level agrifood organizations based on the set of issues they select to inform understandings of how a diversity of AAMs are bound in relation to other agrifood organizations.

This systematic, inclusive attention to agrifood organizations also addresses a key gap in the AAM literature. Although scholars often note the presence and influence of key organizations when describing individual movements (e.g., Obach 2015; Allen 2004; Bain and Danduchi 2014; Schurman and Munro 2010, among many others), patterns of convergence and diversity among organizations across a fuller spectrum of AAMs is lacking. While it is instructive on some level to consider how ‘movements’ relate to each other across issues, these movements are embodied by organizations that set agendas, chose strategies, and mobilize resources. Ultimately, it is organizations, not ‘movements,’ that select issues, and AAMs are pursued by diverse organizations with varied issue foci, goals, strategies, and capacities across the AAM sector (Friedland 2008;

2010; Buttel 1997). As this research will demonstrate, organizations can select many different agrifood issues, and I refer to this combination of issues as the organization's *issue orientation*. This research not only provides an inventory of national-level agrifood organizations, but also categorizes them based on overlapping and differing issue orientations, demonstrating patterns of issue convergence and diversity among national agrifood organizations.

The national scale is an important and understudied level of analysis within alternative agrifood movements research. In practice, much alternative agrifood movement activity and effort is exerted at the local and community level. For example, 'buy local' campaigns emphasize economic motivations of keeping dollars in the community, and the local food movement largely manifests itself through retail food outlets that are alternative to mainstream grocery stores, such as farmers markets, CSAs, and farm-to-school projects (Hinrichs and Eshleman 2014). Community food security projects that seek to increase food availability and access in low-income areas are another example, as their emphasis is largely on community-based projects (Hamm and Bellows 2003). In cases like these, the 'project-focus' of the movements has corresponded with scholarship and research that investigates these movements at the locus of action, the local level. Nonetheless, these movements maintain some level of 'policy-focus,' as decisions that influence these movements can engage multiple levels of government. In particular, the omnibus Farm Bill, among other national policies, has deep and pervasive influence on the U.S. agrifood system and beyond. It is crucial to recognize the potential influence of AAM organizations at the national level. This research provides a systematic analysis of those efforts, including the issues AAMs seek to influence, the strategies they



employ to do so, the resources they leverage in the effort, and their ability to gain access to political leaders.

How to measure the success of AAMs to drive food systems change is a large, open question in the scholarly literature, in particular the transformative potential of AAMs (Constance 2014a; Holt Gimenez and Shattuck 2011; Hinrichs and Eshleman 2014). This research builds from previous scholarship on the U.S. federal agrifood policy process to argue that a key step for organizations to have influence in political matters is the ability to gain acceptance from political leadership (see Gamson 1990). Furthermore, I suggest that an organization's issue orientation will affect the outcome of gaining this acceptance. Several case studies have provided background on the federal agricultural policy process, including the role of alternative agrifood movement organizations in trying to shape legislation (e.g., Browne 1988; 1992; Hansen 1991; Mooney and Majka 1995; Lehrer 2010). Browne (1988: 132) noted the efforts of non-farm public interest groups in the 1980s to create alternative policies and practices, at times positioning "these groups squarely at odds with farm, food, and fiber interests." More recently, Allen (2004: 55-64) emphasized how AAMs have materialized from diverse rationales with competing ideas for how to change the agrifood system, but they have experienced a level of success in institutional reform, suggesting an organizational environment with potential political openings. These accounts point to the need for an updated and more comprehensive empirical analysis of AAM political access, particularly in light of the diverse issue orientations AAM organizations have.

## A Social Movements Framework

Several key concepts from the social movements literature provided guidance for developing a clearer picture of AAM mobilization in this study. In particular, this research draws heavily from research within the resource mobilization approach to understand characteristics of and differences among national agrifood organizations. In addition to the long-held view that organizations both attract resources and function as key resources themselves (McCarthy and Zald 1977; McCarthy 1996), resource mobilization scholars have analyzed how organizational resources (budget, membership, staff size, among others), organizational strategies, and issue selection influence mobilization processes and outcomes.

I apply a field-level approach to analyze not only likely alternative agrifood movement organizations, but also their likely opponents from the status quo agrifood system (see Scott 2004; Klandermans 1992). The value of this field-level approach is evaluating traits of AAM organizations in relation to their opponents, contextualizing AAM organizational patterns in a contentious political environment. With this field-level in mind, I apply specific collective action framing concepts to orient convergence and diversity in the research. While AAMs converge on a *diagnostic frame* that articulates the status quo food system as “the problem,” varied *prognostic frames* of “the solution” to this problem, based on organizations’ issue orientations, demonstrate the diverse interests at play in the national agrifood organizational field (see Benford and Snow 2000; Constance et al. 2014a). Categorizing the field based on issue orientation allows an investigation of *mesomobilization potential* within the larger field. Instead of analyzing the ‘macro’ scale of whole movement mobilization or the ‘micro’ level of individual

activists and organizations, mesomobilization potential refers to the possibility of greater collective influence among particular organizations that share collective action frames and material resources to foster greater collective influence (Gerhards and Rucht 1992). Such a framework aligns with an analysis of alternative agrifood movement convergence and diversity. Within the national agrifood organizational field, I expect to find distinct clusters of organizations to converge with similar issue orientations across a diverse range of organizations and issues. These clusters reflect the mesomobilization potential of convergent organizations, set in contrast to other clusters that frame their issues differently.

Analyzing the outcomes of social movements is particularly challenging, as establishing causation can be difficult since “movements are never the sole actors to intervene on an issue” (Della Porta and Diani: 227). William Gamson’s (1990) empirical intervention on this subject is well known, including the assertion that one measure of social movement success is the ability to gain “acceptance,” validation that their viewpoints are heard as legitimate by decision-makers. Access to Congressional hearings provides an opportunity for organizations to voice their opinions to decision-makers on the public record, and the purpose of such hearings is to inform policy-making (Burstein and Hirsh 2007; Leyden 1995), and I argue that providing this testimony is a proxy measurement of Gamson’s acceptance.

Among several factors that can influence if an organization is able to gain acceptance, material resources are of primary importance and incorporated into this research. An organization’s budget, experience (age), staff size, and commitment to political lobbying correspond with social movement success (Cress and Snow 1996;

Edwards and McCarthy 2004; Johnson 2008; Martin 2008). Specific to Congressional hearings, organizational, lobbying, and federal election contribution (PAC) resources correlate with hearing participation (Leyden 1995; Albert 2003). Organizational strategy is another potential correlate of hearing access, as organizations make specific strategic choices in attempts to generate influence (Jasper 2004). Related to resources, these strategic decisions can help challenger organizations overcome resource deprivation (Ganz 2000). However, the social movements research on which strategies influence outcomes, much of it focusing on disruptive vs. institutional tactics, is largely inconclusive and generally dependent on specific circumstances within the movement or political context (Baumgartner and Leech 1998). This research contributes to this literature by investigating the relationship between organizations' *strategic orientation*—the mix of adherents, targets, and tactics they employ—and providing Congressional testimony, an outcome indicator of acceptance.

Particularly important for this study, issue selection is significant for social movement outcomes. Analysis of the environmental movement has demonstrated that some issues are more likely to attract movement and oppositional attention than others (Johnson 2006). Scholars have argued that social movements attain favorable outcomes when they articulate their concerns specifically (e.g., Cress and Snow 2000) in ways that resonate broadly (McCammon 2001), further suggesting the importance of issue selection. Issue and goal diversity within movements has demonstrated mixed results, on one hand possibly creating more opportunities for successful outcomes (Johnson 2006) and on the other, potentially facilitating disputes and schisms that undermine movement mobilization and success (Benford 1993). Movement organizations identify and endorse

new issues to propel them onto the policy and public agenda and to mobilize greater support (Andrews and Edwards 2004), and this research analyzes which issues are not only taken up by agrifood organizations but also most valued by policymakers, as well as which organizations are chosen by political leaders to represent these issues.

In conclusion, AAMs have emerged in response to problems perceived to be associated with the status quo agrifood system. However, they have focused on different, although sometimes potentially overlapping agrifood issues, such as “local food” and “community food security” among others. The form these alternative agrifood responses take may suggest convergence on some issues, but divergence on others, and systematic empirical analysis of these patterns and processes across the national-level agrifood organizational field in the U.S. has not, to date, occurred. Organizations select issues they seek to redress, and it is an open question if their different issue orientations correspond with patterns of convergence and divergence within the field. Drawing from resource mobilization perspectives in the social movements literature, differences in issue orientation, resource capacity, and strategic orientation across the field of agrifood organizations likely corresponds with the varied ability of organizations to mobilize in the pursuit of agrifood system change, but these patterns in the agrifood movement literature are unclear. Furthermore, to what end these different types of agrifood organizations mobilize has been under examined. One important measure of their success is whether they are recognized and gain acceptance from policy decision-makers, an outcome this research examines.

The remainder of this dissertation is organized as follows. Chapter Two provides a review of the relevant literature on alternative agrifood movements, paying close

attention to the varied issues addressed by organizations within the field and the potential tensions between some of these issues. Drawing on key concepts from the social movements literature, I develop and present the conceptual framework guiding this research, concluding with the three research questions this dissertation seeks to answer. In Chapter Three, I present research methods, including a description of the sample population of agrifood organizations in existence in 2013 (N=690), explanation of variables, and statistical analyses chosen to address the three research questions. In Chapter Four, I present the results from a hierarchical cluster analysis of the sample population of agrifood organizations in two forms—a three-cluster and six-cluster solution—based on organizations’ issue orientations. In Chapter Five, I compare these clusters across a series of resource capacity and strategy variables to examine the relationships between issue orientation and resources and strategies for the sample of national agrifood organizations. In Chapter Six, I apply each cluster solution to a negative binomial regression to test the relationship between issue orientation and the outcome measure of “acceptance,” operationalized as the number of times the organization appeared to provide Congressional testimony from 2009-2014. These models include controls for resources and strategies to isolate the relationship between issue orientation and acceptance. Chapter Seven concludes the dissertation with a discussion of key findings, limitations of the project, and directions for future research.

## 2 Literature Review

In this chapter, I review the literature on alternative agrifood movements (AAMs) and present a social movements conceptual framework for addressing research questions aimed at better understanding convergence and diversity within AAMs, including the issues, resources, and strategies that define this interrelated group of social movements. I begin by defining AAMs and specifying why they are often discussed as a collective enterprise. I next review prevalent critiques of the status quo food system that have constituted the grounds for response by this group of social movements. I then present research on prominent individual AAMs and their origins, interests and approaches. Although previous research suggests overlap in individual AAMs' attention to some issues, these movements also highlight issue diversity. I next discuss the rationale for specific focus on national-level organizations within these movements. Finally, I link the literature on agrifood movements to a social movements conceptual framework that guides my three research questions investigating patterns of convergence and divergence among AAM organizations.

### **Defining Alternative Agrifood Movements**

As a working definition for this study, AAMs can be defined as collections of individuals and organizations with a wide range of sustenance and sustainability concerns that aim to reform the agrifood system to become more environmentally healthful, economically viable, and socially equitable (Allen et al. 2003; Allen 2004: 2). Although broad, this definition incorporates both agricultural production and food consumption concerns, and positions AAMs as a response, or *alternative*, to negative outcomes

associated with the prevailing status quo global food system (Hinrichs and Eshleman 2014), sometimes labeled as *conventional* (e.g., Wright and Middendorf 2008; Constance et al. 2014a; Allen 2004: 1), *industrial* (e.g., Gottlieb and Joshi 2010; Levkoe 2011; Friedmann 2005), and/or *neoliberal* (Holt Gimenez and Shattuck 2011; McMichael 2005)<sup>1</sup>. It is this shared orientation of reaction to the status quo food system that presumably links these movements together (Constance et al. 2014a), leading some to describe a singular “food movement” (Levkoe 2014; Hassanein 2003; Henderson 2000) or to discuss these movements as a collection of movements forming a larger unified movement response (e.g., Holt Gimenez and Shattuck 2011; Friedland 2008).

In contrast, the lack of a “comprehensive or integrated ‘movement’ that gathers together and coordinates the myriad sub-issues and sometimes fractious actors into a united force” suggests not one response to the status quo agrifood system but many (Hinrichs and Eshleman: 138). Here the concept of a social movement “family” is instructive for understanding AAMs. A social movement “family” is “a set of coexisting movements that, regardless of their specific goals, have similar basic values and organizational overlaps, and sometimes even join for common campaigns” (della Porta and Rucht 1995: 232). The underlying beliefs associated with AAMs—that the problems caused by the status quo food system require responsive action—overlap among these movements, but the specific priorities and narrow foci of these movements suggest not one movement, but many (Friedland 2010).

The AAM response to the status quo agrifood system takes many forms and orients a wide range of “individuated” AAMs (Friedland 2008: 197), including

---

<sup>1</sup> Clarification of these terms is presented below, and for the sake of shorthand, I consolidate them with the term *status quo agrifood system*.



sustainable agriculture (e.g., Buttel 1997), organic agriculture (e.g., Obach 2015), local food systems (e.g., Goodman et al. 2012), anti-genetically modified organisms ([anti-GMO] e.g., Schurman 2004), anti-concentrated animal feeding operations ([anti-CAFO] e.g., Bonanno and Constance 2001), community food security (e.g., Gottlieb and Fisher 1996), and fair trade (e.g., Jaffee 2007) among others. These movements are pursued by diverse organizations interested in varied topics, committed to different goals and strategies, engaged in various activities and having different capacities across the broader AAM sector (Friedland 2010; Buttel 1997; Constance et al. 2014a). They present a wide scalar range, from highly localized activities, such as direct marketing and other initiatives associated with civic agriculture (Lyson 2004) to global efforts as by La Via Campesina to advance food sovereignty (Desmarais et al. 2014). Despite the considerable diversity of AAMs, they arguably overlap given that each in some way poses a challenge to the status quo agrifood system.

The negative consequences of the status quo agrifood system form the basis for AAM responses that seek to redress the food system to be more environmentally healthful, economically viable, and socially equitable. In the following section, I begin by defining the key traits of the status quo agrifood system that form the basis for AAM critiques of this system. Then, I briefly summarize these critiques which, taken together, identify the threat posed by the status quo agrifood system and to which AAMs are responding. These criticisms are interrelated but roughly fall into categories of ecological, food access, nutrition and health, farm viability, and social justice concerns.

## The Status Quo Agrifood System

Scholars apply several terms when defining the current status quo agrifood system that, taken together, articulate the grievances to which AAMs are responding. These terms include *conventional*, *industrial*, and *neoliberal*. Some care is necessary in defining each term. Although each relates to the status quo agrifood system, they are not equivalent in meaning or focus. *Conventional* and *industrial* agriculture refer foremost to agricultural production practices, although their implications extend beyond the farm to the systems level. According to the National Research Council (2010: 19-20):

“*Conventional* production in crop systems broadly aligns with: synthetic chemicals to control pests and weeds and enhance growth and yield; intensive planting with few rotations (i.e., monocultures); and depending on the crop, genetically-engineered seed systems (emphasis original).” In animal systems, conventional practices vary by species and herd size, but include partial or full confinement; exclusive grain and forage feeds; antibiotic and growth hormone supplements; and manure storage and spreading. A conventional approach is often set in paradigmatic contrast to alternative production and marketing practices (see Beus and Dunlap 1990), although clear demarcations are blurred in cases like organic agriculture and fair trade where more recent market capture of the alternative characteristics of these movements has arguably conventionalized them (Constance 2014a; Guthman 2004; Jaffee and Howard 2010).

*Industrial* crop and animal production is generally associated with large farm size and intensive specialization; contract farming relationships; high degrees of animal confinement; increased manure loads; extensive divisions of labor including a larger hired workforce; and capital intensive machinery and infrastructure (NRC 2010: 20).

Industrial agriculture systems, particularly in livestock sectors, adhere to a productionist model aimed at industrial efficiency that arguably limits on-farm autonomy to incorporate alternate practices through vertical integration (Hinrichs and Welsh 2003). Although overlaps between conventional and industrial production systems are evident, not all conventional systems are industrial and vice versa.

For other scholars, the status quo agrifood system has been contrasted to AAMs on grounds of the externalities caused by global neoliberalism in the agrifood system. According to Harvey (2005: 2): “Neoliberalism is . . . a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices.” Within the agrifood system, global neoliberalization has been marked by supra-national forms of the state, namely the IMF, NAFTA and other free trade agreements, World Bank, and WTO, that facilitate capitalist accumulation for increasingly powerful agribusiness transnational corporations (TNCs) to direct and control the food system (Constance 2014a) in what McMichael (2005) calls “the corporate food regime.” This system allows TNCs to easily move production capital around to developed countries with cheap labor and weak environmental regulations, while also privileging the privatized global market as the solution to global food security (McMichael 2005). As a result, health, social, and environmental regulations appear as trade barriers, and the system has effectively empowered highly integrated agribusiness TNCs—seed companies, chemical manufacturers, fast food chains, supermarket

retailers—to control the food system at the expense of small landholders and a vast majority of consumers through privatization of public goods (McMichael 2005).

Friedmann (2005) notes the rise of a green capitalist food regime as part of the global neoliberalizing effect, selectively incorporating some concerns originating in AAMs, but in further service to TNC capital accumulation, particularly in the food retail sector. She notes that AAMs are regrouping in response to urge a more democratic agrifood system.

In combination, conventional, industrial, and neoliberal descriptions each contribute to understandings of what the status quo agrifood system is. AAMs may selectively highlight different aspects of the status quo food system to which they are responding—for example, the fair trade movement as a response to neoliberalism in the coffee industry (Raynolds 2009)—but often AAMs are discussed as responses to a more generalized “conventional industrialized agro-food complex” embedded in “the politics of neoliberalism” that I have termed the status quo agrifood system (Maye et al. 2007:1; McMichael 2005: 273). These AAM responses are grounded in more specific criticisms of the status quo agrifood system that I categorize as ecological, food access, nutrition and health, farm viability, and social justice critiques.

### *Ecological Critiques*

Ecological critiques of the status quo agrifood system emphasize the impacts of agricultural industrialization, which has resulted in a productive agrifood system (i.e., higher yields), yet significant environmental costs. Agricultural production inherently depends upon natural resource inputs that are used, altered, and appropriated to produce an abundant food supply, and as a result, intensive agricultural production practices can over time negatively impact environmental quality (Allen 2004: 25; Paarlberg 2013:

116). However, given the need for food to sustain human life, some environmental externalities are expected and acceptable, so agricultural practices, pragmatically, are only damaging when the “long-term costs to human society exceed the short-term food production gain” (Paarlberg 2013: 116). The ecological critique of the status quo agrifood system rests on that basis.

Evidence on the ecological and environmental impacts of the status quo agrifood system is substantial, and a comprehensive overview of this environmental science research is beyond the scope of this dissertation. It is, however, important to note these concerns, many of which are associated with high rates of synthetic chemical applications:

[Environmental research has] documented species depletion and extinction, surface and groundwater contamination by fertilizers and pesticides, “dead zones” of hypoxia in the oceans. Soil erosion, soil degradation, aquifer depletion, “blue babies” due to nitrate fertilizers, fisheries collapse, and the negative impacts of industrial-scale confined animal feedings operations all pointed to the environmental externalities of the uncritical acceptance of industrial agriculture” (Constance et al. 2014a).

As several of these problems suggest, conventional agriculture has deleterious effects on water systems both in quality (through excess nutrient and pesticide runoff) and quantity (through depletion of groundwater for extensive irrigation) (Flint and Krogman 2014). Extensive crop irrigation is also noted as a culprit in the depletion of river water levels and harm to migratory fish species and other wildlife, as habitats suffer the effects of nitrogen and phosphorous pollution associated with chemical-based, monoculture production systems (Paarlberg 2013: 118). Declining biodiversity of both flora and fauna results from extensive fertilizer and pesticide inputs (McLaughlin and Mineau 1995). In addition, the intensive use of fossil fuels in conventional agriculture production is a

growing area of concern for ecosystems, particularly in light of climate change considerations (Stavi and Lal 2013; Wall and Smit 2005; NRC 2010: 70). Also, pollution of water, air, and land is a noted externality of confined animal operations, particularly hog systems (Bonnano and Constance 2001; Jackson 1998; DeLind 1995). Finally, ecological concerns related to increased planting of GMO crops include negative effects on wildlife, contamination of organic crops, and perpetuation of superweeds that require more and stronger herbicide treatments (Bain and Danduchi 2014), as well as a more general disruption of delicate ecosystems balance resultant from gene modification (Schurman and Munro 2010: 59; Reisner 2003).

### *Food Access Critiques*

Despite industrial agriculture's general record of increasing productivity and high crop yields, hunger and undernourishment remain persistent problems in the United States and globally (Allen 2004: 22). Household food insecurity in the United States—measured by lacking access to enough food for an active, healthy life for all household members—affected 14 percent of households in 2014, a rate consistently higher than pre-2008 recession rates (Coleman-Jensen et al. 2015). Retail food consolidation has yielded fewer, but larger chain supermarkets that have relocated to affluent suburbs, producing food environments that exacerbate food access concerns (Guy et al. 2004; Walker et al. 2010), particularly given that food prices are often higher and food quality lower in high poverty areas without supermarkets (Hendrickson et al. 2006). In addition, reductions in the federal food safety net and reliance on emergency food providers and donated foods to solve hunger problems have not only failed to end hunger but have also obscured

claims for distributional justice and facilitated dumping of unhealthy food items (Poppendieck 1998: 6; 210).

### *Nutrition and Health Critiques*

According to Franck et al. (2013: 327-328) and others (e.g., Drewnowski and Spector 2004; Shannon et al. 2015), the conventional agrifood system, supported by U.S. agricultural policy, has led to overproduction of commodities that serve as the unhealthy base of cheap, non-nutritious foods precipitating diet-related health problems: “American farm policy is effectively driving the production and propagation of cheap sugars and oils that lead to widespread weight gain.” The average U.S. diet has seen substantial increases in consumption of unhealthy foods, including “soft drinks, snack foods, added sugars, and other energy-dense, nutrient-poor foods and beverages” occurring alongside dramatic increases in obesity, type-2 diabetes, and other diet-related chronic diseases at a population level (Shannon et al. 2015:157). Furthermore, low-income populations are most affected by these problems (Neff et al. 2009). Constance et al. (2014a) note a bifurcated class-based diet in which the poor rely on unhealthy processed foods based on commodity crops and the affluent select differentiated healthier foods (possibly certified as such), a situation exacerbated through the power of large transnational agrifood corporations (see also Dixon 2009). Here, a diet-related critique overlaps with social justice concerns, elaborated below.

Overlapping with ecological critiques, scholars also describe environmental health problems stemming from the status quo agrifood system. This includes pesticide drift, as areas with the highest concentration of pesticide application also have the highest occurrence of pesticide illness, particularly among farmworkers (Harrison 2011: 36). In

addition, heavy use of sub-therapeutic antibiotics on livestock in CAFOs creates environmental health risks as airborne bacterial concentrations leach into water systems and spur antibiotic resistance (Gibbs et al. 2006). Additional health risks are associated with food safety concerns associated with the status quo agrifood system. Friedland (2010: 602) notes that in 1989, cyanide contamination in Chilean grapes and identification of Alar, then commonly applied to fresh apples, as a carcinogen provided a “crystallizing moment” for the growth of numerous AAMs. Food safety concerns are also an important driving force behind anti-GMO movements (Bain and Danduchi 2014).

### *Farm Viability Critiques*

The economic viability of farmers in the U.S. and globally has long been a concern among AAMs and predecessor, populist farm-based movements (see Mooney and Hunt 1996). Arguably resulting from market concentration, technological advancement, and agricultural regulations that benefit larger farms, the trend of farm consolidation into fewer but larger farm units has been ongoing since the middle of the 20<sup>th</sup> century (Lobao and Meyer 2001; NRC 2010: 45). Despite recent U.S. Agricultural Census data pointing to moderate increases in small farm ownership (NRC 2010: 69), patterns of ownership and economic viability suggest that small farms have difficulty attaining and maintaining profitability. In 2013, 69 percent of all U.S. farms were in the “critical zone” of having potential financial problems, and 87 percent of these were small farms grossing under \$100,000 annually (Hoppe 2014). “Farmers of the middle,” those producers too large to access direct, localized markets, but not large enough to compete in large scale, often globalized commodity markets, have been declining in numbers (Lyson et al. 2008). This is a problem, as these types of farms have historically



contributed to vibrant rural economies and the social life of these communities (Kirshenmann et al. 2008; Guptill and Welsh 2014; Lyson et al. 2008).

Farm viability concerns are significant, too, with regard to specific, historically disadvantaged groups of farmers. Although the number of women-operated farms has increased from five percent in 1978 to 14 percent in 2012, these operators still only account for three percent of total agricultural sales, controlling seven percent of U.S. farmland (Hoppe and Korb 2013). Allen and Sachs (1993) add that gender bias facilitated through traditional family farm structures subordinates women's roles in farming, although sustainable agriculture movements are not fully corrective of this problem. In addition, minority-owned farms total less than five percent of all farm operators, but minorities represent approximately 25 percent of the U.S. population (USDA ERS 2014), and historic patterns of black farmer decline are especially noteworthy. While 14 percent of all U.S. farmers in 1920 were black (Gilbert et al. 2001, the percentage had declined to 1.6 in the 2012 Agricultural Census (USDA ERS 2014). There were several causes of this decline, including overt discrimination and racism within the USDA that limited black involvement in government programs, ultimately culminating in the Pigford v. Glickman class-action lawsuit in 1997 (settled in 1999 and followed by Pigford II in 2010) (Gilbert et al. 2001).

### *Social Justice Critiques*

Class, gender, and race issues in the status quo agrifood system extend beyond the level of the farm and agriculture, per se. For example, Allen (2014: 55) asserts: “[W]omen and people of color are overrepresented in low-wage, servile jobs in the food system, while European-American men are overrepresented in high-wage, powerful

positions . . . [W]e valorize farmers more than we do farm workers and chefs more than waiters or dishwashers.” Speaking directly to harmful health outcomes due to pesticide drift, Harrison (2011: 156) notes that this issue is typically framed in terms of consumer health, not farmworkers who are the most directly affected. Agribusiness and farm operations have targeted a racial and ethnic minority workforce, including migrant, temporary, and undocumented workers, given the low-wages they will accept, their relative weak political standing, and a willingness to accept substandard housing conditions (Mooney and Majka 1995: 124; Gray 2013: 41-67). Barndt (2003) shows how women are exploited across the food system, not just in the fields as farmworkers, and in both the global North and South, as NAFTA’s neoliberal trade relations afford TNCs the flexibility to prioritize efficiency at the expense of marginalized workers. This same flexibility has shifted commodity chains to favor buyers over producers and leads to critiques of trade inequalities experienced by farmers in the global South who do not receive a fair price for the goods they produce to serve more affluent Northern consumers (Raynolds 2009).

Additional social justice critiques consider the relationship of race and class inequalities and (healthy) food access. Agrifood system benefits and risks are seen to produce inequity of “where, what, and how food is grown and produced, transported and distributed, and accessed and eaten” (Gottlieb and Joshi 2010: 6). In addition to policies that limit racial minorities’ ability to own agricultural land, “low-income communities and communities of color often lack access to locally available healthy food, and what food is available is often more expensive than similar purchases in wealthier areas” (Alkon and Agyeman 2011: 4, citing Winne 2008). These authors add examples of

immigration laws, urban planning, and mortgage lending policies that not only negatively shape food environments, but also restrict low-income communities of color to these places.

### **Alternative Agrifood Movements in Response**

The foregoing overview of critiques of the status quo agrifood system suggests many concerns that might be addressed to create a more sustainable, equitable food system. In response, different AAMs have emerged. Importantly, individual AAMs often respond across the critique categories, deepening the complexity of convergence and divergence patterns within this movement family (Constance et al. 2014a; Friedland 2010). In-depth descriptions of each of these movements is beyond the scope of this review, so instead I highlight research on the broad issue categories and interests the movements seek to address. Evidence suggests a complex terrain where AAMs overlap in their orientation to some agrifood system issues, but diverge across others, arguably limiting these movements' ability to coalesce into a unified movement to comprehensively change the status quo agrifood system.

#### *Sustainable and Organic Agriculture Movement(s)*

A movement for sustainable agriculture has previously been discussed by scholars somewhat similarly to AAMs—as a multi-movement aggregation of overlapping efforts, including promotion of organic agriculture (e.g., Buttel 1997; Goodman and Goodman 2007).<sup>2</sup> As noted by Obach (2015: 21): “The [organic] term and concept united the

---

<sup>2</sup> *Sustainable* has long been an ambiguous and contested term. For a recent review on definitions particular to agriculture see Velten et al. (2015). Also, while the movement is commonly referred to with this term, at various points historically it was also labeled “alternative agriculture,” “low-input agriculture,” “ecological agriculture,” and “organic farming” (Allen 2004: 35; Hansen 1996).

movement for several decades,” reflected in the overall goal to support and create an agricultural system that is ecologically, economically, and socially sustainable.

Noticeably, this aligns broadly with the general definition for AAMs presented in this research, further suggesting overlap between the two. However, the sustainable agriculture movement employs a narrower operationalizing of this goal than the larger, umbrella AAMs. With origins in the work of Arthur Rodale in the 1940s and Rachel Carson’s *Silent Spring* in 1962, the sustainable agriculture movement in the U.S. grew markedly in the 1980s out of specific emphasis on ecological degradation, and farm viability concerns raised by the spread of industrial agriculture and the rural economic ruptures imposed by the 1980s farm crisis (Paarlberg 2013: 167-68).

The movement for sustainable agriculture has stressed positions of advocating for better regulation of chemical use, opposing industrial livestock practices, challenging the public absorption of externalities caused by the status quo agrifood system, promoting conservation and preservation, and balancing the environmental and socio-economic impacts of agriculture (Buttel 1997). Promoting sustainable agriculture has also been specifically linked both to efforts for farmland preservation (e.g., Pfeffer and Lapping 1995; Wiltshire et al. 2011) and climate change mitigation (e.g., Buttel 1993; Wall and Smit 2005; NRC 2010: 70). Socially, the movement for sustainable agriculture has emphasized the importance of family farms and small-scale operations (Allen 2004: 150; 199; Harrison 2011: 152), constructed as counter to the increasing scale, chemical and machinery inputs, and vertical integration on large-scale industrial farms that benefits agribusiness companies in the chemical, seed, meat, and other sectors (Youngberg and DeMuth 2013). In what Buttel (1997: 355) refers to as “indiginism,” the sustainable

agriculture movement has emphasized “achieving ecologically stable, socially harmonious, decentralized communities, and making possible de-industrialization of the relations between food production and consumption.” Here, sustainable agriculture not only overlaps with the consumption logics of the local food movement (discussed below), but also signals concern about quality of life and rural community vitality.

The organic agriculture movement overlaps considerably with the sustainable agriculture movement, but is differentiated by specific concern with the development and enforcement of effective federal organic policy and standards. Harrison (2011: 153) calls organic agriculture the “flag-bearer” for alternative agriculture, at times a “legislative force” in policy matters. Although formal organic agriculture now codifies very specific agricultural production practices, the organic movement originated with broader social values (Obach 2015: 14). However, the organic movement is unique since “[s]ocial change is pursued not through government intervention but instead by creating a parallel system of production that, it is hoped, will eventually displace the dominant dysfunctional order,” through emphasizing consumer education and a market-oriented solution (Obach 2015: 15). In the 1980s, contention over the meaning of organic pushed the sustainable agriculture movement to engage federal legislation of standards, which were understood to be coming with or without the movement’s input (ibid: 71). The importance of federal organic standards creation led to the formation of a broad organic coalition of varied interests including not only farmers but also consumers, retailers, processors, environmentalists, scientists, health advocates, certifiers, animal rights groups, rural preservation organizations, and public interest groups, providing both weighty resources and a divisive set of interests to negotiate. As a result, the details of

the organic legislation were created with little input from the originators of the movement—organic farmers themselves (ibid: 20; 71).

Key in Obach's in-depth account of the organic movement is that the broad base of organizations involved in the movement have brought differing perspectives and goals on how to achieve desired outcomes. The organic movement, like most movements, is not on closer examination monolithic; by creating space for corporate agribusiness interests to enter, the organic movement has split into those oriented to growing the organic *industry* through more inclusive standards and those more committed to the original small-scale organic agriculture and populist roots of the sustainable agriculture movement. One result has been the conventionalization of organic food and agriculture where the social values of the movement have been superseded by input substitution such that organic farming mirrors the industrial production relationships it originally sought to challenge (Guthman 2004; Jaffee and Howard 2010; see Constance 2014a: 12-13 and Darnhofer et al. 2010 for reviews). However, the organic movement, still linked to sustainable agriculture in many ways, has also remained successfully organized to have political impact:

Unlike ever before in history, there is now a sizable and mobilized sustainable agriculture constituency, and organic advocacy organizations are central to that effort. Consumer organizations and environmental groups are more engaged with agriculture issues than at any time previously. These groups, frequently taking cues from organic advocacy groups, now regularly weigh in on matters of agricultural policy (Obach 2015: 236).

### *Local Food Movement*

The local food movement emphasizes direct exchanges between agrifood producers and consumers through venues such as farmers markets, community-

supported-agriculture schemes, and farm-to-institution programs (most commonly schools). As the name suggests, much of the emphasis is on place, and local food initiatives have been positioned as market-based drivers of civic engagement (i.e., connecting consumers and producers directly and fostering community identity), economic development (i.e., supporting small-farm businesses and entrepreneurs), and sustainable agriculture (as it overlaps with local food systems to be alternative to the status quo agrifood system), what Lyson (2004) refers to as “civic agriculture.” DeLind (2002: 217) adds: “[C]ivic agriculture has the power to focus public attention on the contradictions within our industrially-modeled and corporately-controlled agriculture, as well as on the potential of ‘relocalized’ food systems.” Although local food systems are not necessarily predicated on sustainable agricultural production per se, local food movement initiatives often claim environmental benefits including farmland preservation, protecting genetic diversity, and reducing energy and pollution in a number of ways. In a study of ‘Buy Local’ campaigns, Allen and Hinrichs (2007) found claims of environmental and economic benefits (i.e., keeping money in the community and supporting farmer livelihoods directly) to be most common. These authors further found that the campaigns made claims that local foods are more nutritious, safer, and of higher quality than their conventional counterparts, although such claims and others for local foods are not necessarily empirically substantiated and may be difficult to achieve in reality (Paarlberg 2013: 178; Mount 2012). The local food-nutrition linkage has been especially prominent in proponents’ framing of farm-to-school initiatives (Bagdonis et al. 2009) with some programs reporting significant success in improving children’s diets with local food (Joshi et al. 2008). Success in the local food movement may be measured

by the rapid growth in number and scope of its signature market channels—farmers markets, CSAs, and farm-to-school programs (see Martinez et al. 2010)—supported by a base of committed consumers willing to pay a premium for locally raised food (Paarlberg 2013: 179).

Some scholars suggest that the local food movement, working so locally and being market-oriented, has not had a strong presence in the federal agrifood policy realm. For example, Obach (2015: 23) contends this movement is more a consumer trend with social values than a political effort. However, national-level local food policies have increased in number and scope since the 1970s, beginning with the Farmer-to-Consumer Direct Marketing act of 1976, largely due to efforts of advocacy coalitions to cultivate Congressional support (Hunt 2015). Such a policy presence is apparent in newer federal local food programs including the Farmers Market Nutrition Program, farm-to-school programs including the Healthy, Hunger-Free Kids Act of 2010, and the USDA’s Know Your Farmer, Know Your Food program, as well as symbolic gains like Michelle Obama’s White House garden (Hunt 2015; Paarlberg 2013: 179).

### *Fair Trade Movement*

Evolving out of critiques of global neoliberalization’s harmful impact on farmer livelihoods in the Global South, the fair trade movement has created channels for consumers in the Global North to support these producers. The fair trade movement originated through Alternative Trading Organizations in the 1960s and 1970s in the U.S. and Europe seeking to generate employment and income for impoverished and displaced people in the Global South by establishing cooperatives and trade networks, mostly focused on handcrafts, tea, and coffee. Concurrent efforts, mostly in Europe, had a



stronger political tone of solidarity in critique of capitalism and aimed at promoting development through empowerment (i.e., local ownership) as opposed to charity and foreign aid (Jaffee 2007: 12-13). In 1988, the first certification scheme was established between Mexican coffee growers and the Dutch development aid organization Solidaridad, opening access to the mainstream marketplace, “arguably the moment when ‘alternative trade’ became fair trade” (Jaffee 2007: 13). Since then, an array of various fair trade certification labels and cooperative networks have emerged across the globe, and although coffee has long been fair trade’s core commodity (Raynolds 2009), fair trade programs for bananas, tea, cocoa, sugar, honey, rice, and orange juice have followed (Jaffee 2007: 15). Fair trade products, particularly coffee, continued penetrating the mainstream marketplace through the 2000s, including adoption by major corporate buyers like Starbucks, Proctor & Gamble, and Dunkin’ Donuts among others (Jaffee 2007: 16). Although different certifying bodies have different criteria for fair trade, Jaffee (ibid: 2) lists the following common criteria:

- a. Guaranteed minimum (floor) prices to producers; fair wages to laborers; social development premium;
- b. Advance credit or payment to producers;
- c. Democratically run producer cooperatives or workplaces;
- d. Long-term contracts and trading relationships;
- e. Environmentally sustainable production practices;
- f. Public accountability and financial transparency;
- g. Financial and technical assistance to producers; and
- h. Safe, non-exploitative working conditions.

Fair trade thus embodies goals similar to AAMs and sustainable agriculture movements described above—progressing to ecological, economic, and social sustainability in contrast to the more harmful conditions created and maintained by the status quo agrifood system.

Similar to organic agriculture and other market-based expressions of social movements, distinguishing the fair trade movement from the fair trade industry has created internal tensions and challenges (Jaffee 2007: 26; 2010; Howard 2010; Reynolds 2009, 2012). For some proponents, the goal of fair trade is to make *all* trade fair, while for others it is to establish an alternative market (Renard 2003). This former, more radical strand positions fair trade as a counter to the free trade policies and principles that characterize contemporary neoliberalism (Jaffee 2007: 33). But by conflating fair trade *certification* (or system) with fair trade *movement*, fair trade movement organizations have opened themselves up to cooptation by firms that want to capitalize on the fair trade brand (Jaffee 2012). Reynolds (2012) counters that while corporate mainstreaming of the fair trade movement presents challenges, this view understates the ability of diverse activists and networks to resist cooptation and present a formidable market alternative.

#### *Anti-CAFO Movement*

In response to the environmental and social externalities associated with confined animal feeding operations (CAFOs), anti-CAFO campaigns and groups have mobilized against this approach to livestock agriculture on various grounds, often at the rural grassroots level. In a case study based in Michigan, activists resisted the scale of CAFOs and the volume of animal waste they produce, argued to harm quality of life, human health, and environmental quality (DeLind 1995). Summarizing a few primary grievances, Wright and Middendorf (2007: 12) note CAFOs “cause respiratory problems among employees and health ailments for those living in the vicinity of the operation, pollute water sources from runoff, lagoon spills, and leakage, and degrade neighbors’ quality of life owing to the odors, water pollution, and community contention they

create” (citing Jackson 1998; see also Constance et al. 2003). In addition, activists have resisted CAFOs on economic grounds, citing the decline of local property values, overall negative impacts on community socioeconomic health, and threats to independent family farming from the corporate business practices associated with the CAFO model, despite industry claims that CAFOs provide local jobs (Bonnano and Constance 2001; Constance et al. 2003). Other issues revolve around the ubiquity of sub-therapeutic antibiotic use in CAFOs, creating new bacterial pathogens and contributing to antibiotic resistance in human populations (Williams 2004). CAFOs have also attracted criticism and action from animal rights groups concerned with inhumane treatment of animals (Holt 2008).

This mix of issues associated with CAFOs has led to resistance from diverse organizations and activists including labor, sustainable agriculture, public health, environmental, and animal rights interests (Williams 2004). In many cases, anti-CAFO activism has focused on local siting and regulatory controls to limit the impacts of CAFOs, resulting in some companies relocating to geographies where local opposition is less pronounced (Williams 2004; Bonnano and Constance 2001). However, the anti-corporate tone of some CAFO resistance has helped local groups connect to a broader national resistance, including mainstream environmental groups like Sierra Club (Williams 2004). Under the jurisdiction of the Clean Water Act and the Clean Air Act, anti-CAFO groups have at times sought legal and regulatory recourse through mandates in these laws, but an unsupportive political environment and the high costs of participation create barriers to federal level influence (Williams 2004).

### *Anti-GMO Movement*

Criticism of agricultural biotechnology generally and genetically-modified organisms specifically began in the 1970s when these new technologies became possible with the development of new gene splicing capabilities. Two primary critiques mark this early activism: a) “social, moral, and ethical issues raised by intervening in nature” advanced by skeptical scientists, environmentalists, and technology critics and b) “the loss of genetic diversity in the ‘gene rich’ global South and the growing corporate control over seeds” as argued by development critics of neoliberalization (Schurman and Munro 2010: 57-58). The anti-GMO movement grew from each of these threads, as early activists were particularly successful at linking biotechnology externalities to a wide range of other issues including farmer (specifically sustainable agriculture [Reisner 2003]), environmental, and consumer advocacy organizations (Schurman and Munro 2010: 78). Leftist labor and animal rights organizations have also participated (Reisner 2003). However, despite growing energy in the U.S. anti-GMO movement into the 2000s, effective industry counter-mobilization, a supportive regulatory environment provided by the federal government, strong ties between the biotechnology industry and commodity farming organizations, and an unengaged consumer culture mitigated advances by the movement, especially compared to Western Europe where GMOs were unofficially shut out of the market (Schurman and Munro 2010; 119-20). Unable to advance an agenda to ban or label GMOs at the federal level, since 2012, the U.S. anti-GMO movement has shifted to state-level mandatory labeling efforts, but with limited success to date (Bain and Danduchi 2014).

Although goals of banning GMOs or requiring mandatory labeling have not thus far been met, the anti-GMO movement has had several smaller achievements. First, the movement made incremental gains in GMO regulation, such as requirements for buffers around GMO plantings and stricter pre-market testing (Schurman and Munro 2010: 145). Second, consumer education about GMOs has likely increased demand for these products, potentially influencing food industry firms to respond with non-GMO products (Bain and Danduchi 2014). For example, demand for rBGH-free milk in supermarkets likely contributed to growing production and marketing of this “alternative” dairy product (Schurman and Munro 2010: 146). Third, the anti-GMO movement has drawn in a diverse cross-section of interests able to articulate a shared interest. Alliances such as these may bode well for future efforts to create change in the status quo agrifood system (Magnan 2007).

#### *Community Food Security Movement*

The community food security movement emerged in the 1990s with a new approach to meeting the food needs of low-income people. Unlike traditional anti-hunger approaches reliant on emergency food services (i.e., food banks, soup kitchens), federal entitlements, and recovery of food waste from the status quo agrifood system, the community food security movement was founded to shift the focus of hunger from an individual condition to one of community need and capacity, defined as the ability “of all persons obtaining, at all times, a culturally acceptable, nutritionally adequate diet through local, non-emergency sources” (Gottlieb and Fisher 1996: 24). Hamm and Bellows (2003:37) amend this definition to emphasize “a sustainable food system that maximizes self-reliance and social justice,” which includes an array of agrifood system issues such

as farmland preservation, environmental well-being, and transportation (Allen 2004: 45). The social justice component is conferred in a long-term goal to prevent food insecurity in the first place, and a chief principle is the development of self-reliance and empowerment so community members meet their own food needs, as opposed to depending upon emergency and charitable food relief (Hamm and Bellows 2003; Allen 2004: 45; Gottlieb and Fisher 1996). Relatedly, there is a strong emphasis on community and economic development through community food production, including local foods direct marketing, urban agriculture, community gardens, and food processing (Gottlieb and Fisher 1996; Allen 2004: 45). In addition, community food security activists aim to promote a locally-based sustainable agriculture that provides “fair farm wages, job security, training and support for new farmers, farmland preservation, and better relations with consumers” (Hamm and Bellows 2003: 39). As a result of these many principles, the community food security movement presents noticeable overlaps with the sustainable agriculture and local food movements as a market-based approach to long-term alleviation of food insecurity. The goal, not necessarily realized, has been described as a potential “win-win” for both small-scale farmers and low-income consumers (Guthman et al. 2006).

From its outset in 1994, the community food security movement was coalitional, bringing together organizations rooted in sustainable agriculture, community development, environment, and anti-hunger activism to inform the 1995 Farm Bill (Gottlieb 2001: 227). Despite diverse interests and a challenging political environment (marked by a conservative Republican ascendancy in the 1994 mid-term elections), a new Community Food Projects grant program was authorized with the 1996 Farm Bill.

Subsequent local and regional projects and networks fostered by the then newly formed Community Food Security Coalition helped legitimize the movement, with continued success in the federal political arena, including the USDA's own Community Food Security initiative and development of farm-to-school policies that included community food security outcomes (Gottlieb 2001: 232, 268). As the name suggests, community food security projects are highly localized and include establishing farmers markets, community gardens, farm-to-school programs, partnerships with grocery stores, and public transit policies all aimed at increasing food access in low-income areas (Harrison 2011: 154). Although the Community Food Security Coalition ceased operations in 2012, the Community Food Projects Competitive Grant Program continues, as do locally-based community food projects, some recast as *food justice* projects with specific emphasis on race and class injustices as intertwined with food access concerns (e.g., Gottlieb and Joshi 2010; Alkon and Agyemon 2011).

### *Healthy Food Advocacy*

Although not specifically a social movement, concurrent with the growth of AAMs, there has been dedicated attention to the importance of policies and programs aimed at improving diet-related health outcomes in the U.S. Healthy food advocacy is noted here for two main reasons. First, many AAMs incorporate access to healthier food as part of their aims. In her description of the AAM, Harrison (2011: 145) notes "food reformers" as one of the most active movement threads currently. This group includes those who link specific modes of consumption (e.g., buying and eating local food) and food choices (e.g., avoiding high fructose corn syrup) to a wide array of outcomes including "solving the 'obesity epidemic' and becoming more knowledgeable about the

agrifood system.” As the author concludes, the diet-reform approach obscures key tensions of individual behavior modification (see also Guthman 2011), but linking healthy food to AAMs is still common. As noted above, a common stated benefit of farm-to-school programs is provision of healthy food for children, further argued to improve academic performance (Joshi et al. 2006), and in his call for a revamped “healthy-eating activism,” Winson (2010) highlights school food and farm-to-school as a logical direction for such action. In Ontario, Canada, Mount et al. (2013) found that 27 percent of local food projects surveyed were motivated by health and diet concerns, often in conjunction with food access. By definition, community food security approaches specify a “nutritionally adequate diet,” set in contrast to emergency food provisions deemed unhealthy by some (see Poppendieck 1998: 215-16). From its outset, organic agriculture was linked to healthier, natural foods (Haydu 2011), although scientific evidence on actual nutritional content in organic foods has been inconclusive (Obach 2015: 131).

Second, increasingly public health advocates have sought to link diet-related health issues to AAMs. For example, the American Medical Association passed a resolution in 2009 encouraging doctors to promote local and organic food to improve patient health (Durum and Oberholtzer 2010). Extending Lyson’s (2004) civic agriculture, Wilkins (2009: 59) calls for a “civic dietetics . . . to describe the promotion—through professional dietetic practice in community nutrition, education, research, consulting, or clinical nutrition—of a sustainable, just, economically viable, community-based food system.” Key to the approach is recognizing that personal choice and behavior modification have a role in health outcomes (i.e., traditional dietetics), but those



choices are informed by environmental, social, and economic conditions, which should also inform dietetic practice. In addition, public health professionals focused on improving food environments, including schools and communities, intersecting with community food security intentions to link low-income consumers to local food sources, with a key emphasis on increasing the availability of fresh produce (Story et al. 2008). Noting that “the current food system in the United States is enabled by policies that perpetuate the status quo,” Shannon et al. (2015: 152) present several policy measures to alter the food system to attain better public health outcomes, including prohibiting of sub-therapeutic antibiotics in animal agriculture, incentivizing fruit and vegetable production, expanding local food and federal entitlement programs, and incorporating sustainability criteria in the U.S. dietary guidelines among others (see also Muller et al. 2009). Implicitly, the authors link sustainable agriculture and local food systems to diet-related outcomes, while also promoting the environmental and social benefits of such agrifood system approaches.

### **Alternative Agrifood Movements: Issue Diversity**

The above review of several specific AAMs demonstrates that these different movements have overlapping critiques of the status quo agrifood system. However, these movements do not converge precisely in their concerns about or approaches to various agrifood issues. A growing literature on the friction within and across AAMs suggests the ways these individual movements also diverge from one another, both ideologically and in practice. I refer to issue divergence as a specific tension that emerges when actors within the AAM family select different topical foci, seeking to influence some issues, while not prioritizing others among the many extant AAM critiques of the status quo

agrifood system. This section presents scholarship examining key areas of AAM divergence.

Several scholars have argued that while the sustainable agriculture and organic movements began with more radical social justice aims, such emancipatory aims have gradually dissipated. Goodman and Goodman (2007: 25) describe a shift toward “technocratic alternative managerialism” emphasizing production inputs as opposed to social justice, and over time the environmental goals of sustainable agriculture have superseded social priorities (Allen 2004: 199). Specific to organic agriculture, policy focuses more on sanctioned forms of input substitution rather than on social equity concerns, creating space for the conventionalization of organic agriculture (Guthman 2004). Furthermore, when social justice has been recognized in AAMs, it has tended to emphasize the economic survival of “family farmers,” not the full breadth of actors working in or affected by the status quo agrifood system (Allen et al. 2003; Harrison 2011: 156; Guthman 2011: 151; Allen and Hinrichs 2007). Issues of gender, race, and class have each received attention in these critiques.

According to Allen and Sachs (1993: 147), while the status quo agrifood system has “developed with highly skewed power distributions that marginalize women and people of color,” the sustainable agriculture movement has not been particularly corrective of this power imbalance. While women are quite active and visible in AAMs, gender inequities have received minimal attention (Allen 2014). In addition, the increased shopping and food preparation tasks associated with local food systems, may actually “reinscribe traditional gender roles and discrimination” since much of this work falls to women in the household (Allen 2014: 58; Allen 1999). These gender roles also

pervade the food service industry and throughout the commodity chain (Barndt 1999; Sachs et al. 2014). One response, particular to agricultural production, has been the development of women's agricultural networks, identified by Hassanein (1999: 123) as a "social movement community." In many cases these networks align closely with AAMs, but they emphasize the specific positionality of and learning needs identified by women farmer members (e.g., Hassanein 1999; Trauger et al. 2010; Trauger 2004).

Despite significant attention to the plight of small, family farmers within the sustainable agriculture movement, the disproportionate loss of farmland among black farmers has historically received little concerted attention (Allen and Sachs 1993; Green et al. 2011). The idealized nostalgia of an agrarian agricultural past evident in some AAMs does not resonate with the slavery and sharecropping histories experienced by black U.S. farmers (Green et al. 2011). Furthermore, the challenges posed by the status quo agrifood system have been exacerbated for black farmers who have also endured restricted access to credit and discriminatory policies within the USDA (Green et al. 2011; Gilbert et al. 2001). The needs of black farmers have not been incorporated into many AAM agendas, although increased collaborations between sustainable agriculture and community food security organizations have yielded productive outcomes such as the Socially Disadvantaged Farmers and Ranchers Program in the 1990 Farm Bill (Green et al. 2011).

The absence of attention to race in AAMs is apparent beyond the production sphere, leading Slocum (2007: 531) to conclude: "Whiteness is an organizing feature of alternative food practices," specifically in retail venues like natural food stores, food co-ops, and farmers markets where alternative agrifood values are central. The romanticized

vision of the American farmer commonplace in these spaces may reproduce whiteness, as such a vision of agriculture obscures the oppression non-whites in agriculture have endured (Alkon and McCullen 2010). To become more socially just, organizations in these movements must welcome deliberate internal cultural changes that address the impacts of the performance of whiteness in their work, as even efforts framed as ‘food justice’ that focus on the right to good food for all may struggle to implement justice into practice (Slocum 2006; Cadieux and Slocum 2015).

Although efforts to address the disadvantaged working and social conditions of farmworkers have a long social movement history, the relative absence of attention by most AAMs to farmworkers and other workers in the food system is longstanding. (Hinrichs and Eshleman 2014). While attention to the viability and prosperity of family farms has been central, these interests do not readily match those of farm laborers seeking safe working conditions and fair wages (Shreck et al. 2006), and sustainable agriculture proponents have been slow to recognize these divergent interests (Allen and Sachs 1993). For example, in their study of California AAM organizational leaders, Allen et al. (2003) found that farmworker justice was not a strong programmatic priority, and confronting labor injustice in food service and processing has been an additional blind spot in these movements. In addition, organic farmers, particularly those who hire farmworkers, have shown resistance to additional certification standards that would include farm labor criteria (Shreck et al. 2006). Where social certification in agriculture has been pursued, the lack of involvement from farm laborers in the development of those standards has meant their actual needs and interests were insufficiently addressed (Brown and Getz 2008). Although pesticide exposure most directly affects farmworkers, regulatory reform

to change field operations and procedures has been less prioritized by most AAMs than endorsing alternative consumption strategies; in this respect, the consumer's desire to avoid consuming pesticides has taken precedent over the public health imperative to reduce all agricultural laborers' pesticide exposures (Harrison 2011: 155-56). More generally, by treating the family farm as a social ideal, most AAMs have reduced their ability to challenge the labor injustices that frequently occur on these farms or even to consider the possibility of their occurrence (Getz et al. 2008; Gray 2013).

Additional divergence across AAMs relates to social class concerns. As Guthman (2011: 151) describes, "through its abiding support of producers who employ more sustainable methods, the alternative food movement creates a problem of affordability—by design" where more advantaged consumers can buy their way to quality food and poorer, less advantaged consumers cannot. While some consumer-based AAM activities may intend to address class concerns, the outcomes most directly benefit the privileged (Allen 2008). This consumption-class tension is most clear in food access advocacy where an emphasis on ecological sustainability might counterproductively raise food costs for low-income consumers (Levkoe 2011). Similar to their conventional agriculture counterparts, sustainable agriculture organizations historically support policies that encourage higher food prices, and the linkage of food entitlement and agricultural programs in the Farm Bill creates competition for resources (Clancy 1993). Presented as a "win-win," community food security approaches have sought to serve both locally-based sustainable agriculture and low-income consumer needs, but some researchers argue that the needs of farmers have trumped those of consumers in many local food schemes (Guthman et al. 2006; Guthman 2011: 151). While community food security

approaches that emphasize self-reliance can be construed as a valuable long-term goal, critics also stress that turning away from concern for adequate federal food entitlements could harm low-income consumers (Allen 2004: 110). As market-oriented responses to hunger, local food schemes “permit the devolution of responsibility for food security to increasingly smaller and less powerful scales of action,” requiring political advocacy beyond the local scale, including stronger federal entitlement programs (Perkins 2012: 203).

Although anti-hunger efforts since the 1960s included strong political advocacy, Republican policies in the 1980s shifted the focus to volunteerism and emergency food provision by limiting federal public entitlements such as food stamps (Poppendieck 1998: 11-15). The emergency food system has evolved to rely not only on a large volunteer base, but also corporate donations from private firms generally criticized within AAMs; such corporate food donations tend to be unsold and often unhealthy foodstuffs (Tarasuk and Eakin 2005). This corporate involvement in anti-hunger efforts further limits the potential for policy advocacy in this area, despite the internal knowledge of anti-hunger advocates that the emergency food programs they run are not long-term solutions to hunger (Poppendieck 1998: 258; 268-276). Emergency food leaders generally still support stronger entitlement programs, but much of their energy is focused on day-to-day challenges of service provision (Poppendieck 1998: 156). Although community food security organizing emerged as a response to the prevailing model of anti-hunger work, necessary overlaps still exist between these two movements (Hamm and Bellows 2003). For example, although food banks have been criticized by community food security advocates, some food banks have responded in the 2010s with working to incorporate

local foods and food literacy programs into their services (Vitiello et al. 2015). These relationships across anti-hunger and community food security approaches suggest both commonality and difference.

Broadly defined then, AAMs point to a group of agrifood change efforts that overlap in their orientation to oppose (or create alternatives to) the status quo food system, but are diverse in the specific issues they prioritize to effect this change. Recent scholarship has characterized this situation of commonality and difference as “patterns of convergence and divergence” or “convergence in diversity” within AAMs (Constance et al. 2014b; Amin 2011: xvi; see also Holt Gimenez and Shattuck 2011). However, a key shortcoming of this literature is a lack of systematic empirical engagement that shifts the discussion from the “movements” level to a more precise “movement organizations” unit of analysis. It is these organizations, not reified “movements,” that contend with convergence and diversity within AAMs to mobilize action.

### **From Movements to Organizations**

Although scholars have described the key roles of organizations *within* specific AAMs (e.g., Obach 2015; Hunt 2015; Schurman and Munro 2010), a systematic accounting of organizations *across* the movement family has not been undertaken. To better understand patterns of convergence and divergence across these movements, it is necessary to analyze the organizations that comprise these movements.

#### *Alternative Agrifood Organization: National Level*

Much scholarship on AAMs has focused on local level mobilization and development, particularly in analyses of local food systems and community food security.

Nonetheless, agrifood policy is regularly on the Congressional docket and many key decisions are made at the national level, presenting an institutional context for these organizations to have influence. For example, among their recommendations for the future of sustainable agriculture, the National Research Council (2010: 5-10) recommended strengthening federal public policies to encourage a more sustainable agriculture. As case studies of the omnibus Farm Bill specifically and national agricultural policy generally have demonstrated, many of the issues pertinent to AAMs are debated and decided upon in the halls of Congress (e.g., Lehrer 2010; Browne 1988; 1995; Hansen 1991). This includes opportunities for an array of AAM organizations (AAMOs) to influence the political agenda. Organizations include producer, environmental, consumer, and other interests pursuing their favored alternatives to prevailing agricultural policy (Browne 1988: Chapter two). Buttel (1997) identified several types of national AAMOs, arguing that, if united, they could challenge the status quo agrifood system. His list included farmer-oppositional, farmer-support, sustainable agriculture, mainstream environmental, organic and healthy food, and food/nutrition/consumer/safety organizations. Added to this list could be community food security organizations, including the now defunct Community Food Security Coalition (Allen 2004). However, as argued above, these types of organizations have different goals and constituencies that affect the possibility for them to converge into unified coalitions (Buttel 1997).

Case studies of individual AAMs have highlighted several national-level organizations. National organizations including the National Coalition of Sustainable Agriculture and the Environmental Defense Fund were prominent in the development of



federal organic policy, and the addition of consumer groups like Center for Science in the Public Interest (among others) provided helpful resources and political support, on one hand, but division and contestation, on the other (Obach 2014: 20, 71, 83). In another example, Reisner (2003) analyzed the discourse of organizational members in the national-level Turning Point Coalition that opposed GMOs, finding progressive scientific, food and agriculture, environmental, consumer, animal rights, and labor organizations to be involved. She found, similar to Obach's (2014: 71) later work, that farmer-specific concerns were marginalized relative to urban environmental and consumer interests in the coalition, yet common ground regarding the need to oppose GMOs was attained. With an emphasis on certification, national fair trade organizations, such as Transfair USA, have been particularly powerful within the fair trade movement, although their one-size-fits all label has generated controversy between smaller, movement-oriented member firms and their larger corporate counterparts (Jaffee 2007: 205-207). Several other examples are noted with both broad and specific interests including "direct farm impact" organizations (e.g., The Center for Rural Affairs [emphasizing sustainable agriculture assistance], The Federation of Southern Cooperatives/Land Assistance Fund [specifically supporting black farmers], and Northeast Organic Farming Association), farmer training organizations (e.g., The Rural Development Center), sustainable agriculture research organizations (e.g., The Land Institute), and policy advocacy and analysis groups (e.g., National Farmers Union and Institute for Agriculture and Trade Policy) (Henderson 2000). Despite differing goals, many of these organizations have joined together in the National Sustainable Agriculture Coalition (Henderson 2000).

## *Status Quo Agrifood Organizations*

Although the AAMs literature has presented wide-ranging critiques of the status quo agrifood system, comparatively less attention has been given to organizational representatives of status quo food system interests. As noted above, a key critique of the status quo agrifood system is that the rise and entrenchment of neoliberal policies have shifted too much power and influence to transnational corporations (TNCs). Thus, the trade associations representing these TNCs and other agribusinesses stand as possible representatives of these interests. Since private firms have varied interests and issues to monitor, joining a trade association as a means of political representation is a common approach (Browne 1988: 121-122). There are many agrifood trade associations across different sectors, including the Grocery Manufacturers Association, Food Marketing Institute, and Corn Refiners Association among many others (Browne 1988: 122-123). Buttel (1997) noted that the rise of sustainable agriculture approaches in agriculture has fed counter-movements to maintain the status quo, which include organizations such as commodity groups and conservative think tanks. Commodity groups representing specific farming sectors and their producers along with farm organizations and trade associations generally “value economic productivity in agriculture above environmental and social concerns, although they certainly acknowledge that agriculture should protect the environment and rural communities” (Lehrer 2010: 17). Key among farmer organizations is the largest, the American Farm Bureau Federation, long noted for its free market, anti-regulatory orientation and political conservatism (Mooney and Hunt 1996; Mooney and Majka 1995: xx) and identified as an opponent of both anti-GMO (e.g., Reisner 2003) and anti-CAFO (DeLind 1995) movements.

Although the above account of AAMs, their organizations, and their potential opponents from the status quo agrifood system draws distinctions between these many players, a binary orientation to this field (alternative vs. status quo) would be oversimplified. Even though AAMs cohere around general critiques of the status quo agrifood system, the more specific issues they select and focus on suggest diversity across AAMs, as described above. Second, these movements (and the counterpart status quo agrifood system) are comprised of organizations with different rationales and forms across a complex issue terrain, suggesting that a sharp AAM-status quo binary obscures organizational heterogeneity (Mount et al. 2013; Holt Gimenez and Shattuck 2011). As noted by Tregear (2011: 424): “In reality, however, food systems rarely operate exclusively within these artificially circumscribed boundaries, they dip into, or borrow from, diverse logics over time . . .” In other words, empirically, researchers miss opportunities to scrutinize cases where organizations might exhibit status quo traits and vice versa. This research questions the binary formulation of alternative and status quo agrifood organizations and explores the ways agrifood organizations, whether stylized as “alternative” or “status quo,” actually exhibit convergence and divergence across a complex terrain of varied agrifood issues.

### **Social Movements and Convergence and Divergence in AAMs: Theory and Framework**

This study’s examination of convergence and divergence across a range of agrifood issues draws from several theoretical contributions offered by social movements research. Although scholarship on individual AAMs has invoked social movement theory (e.g., Starr 2010; Schurman and Munro 2010; Hunt and Mooney 2009) social movement

theoretical frameworks for understanding AAMs as an overlapping collective project, (or family) have not engaged major schools of social movements theory such as resource mobilization, political opportunities, and strategic action frames. Instead, AAMs, as a whole, have been theoretically situated in three main ways: 1) in relation to historical “food regimes” which highlight political economic dynamics that consolidate particular structural relations between agriculture and capitalism (Friedmann 2005; McMichael 2005; Holt Gimenez and Shattuck 2011); 2) as instances of new social movements prioritizing the creation and transformation of new social identities, values, and lifestyles (Hassanein 2003; Mooney and Majka 1995); or 3) the cognitive identity of movements, shaped through movement discourse and practice (e.g., Allen 2004). Each of these contributions is useful in its own way. The first two establish the historical roots and foundations of AAMs—essentially, describing *why* these movements emerged when they did—and the latter offers clarity on core assumptions and discourses developed within and across these movements. However, additional social movements concepts are instructive for a better understanding of convergence and diversity within the AAM family.

### *Collective Action Frames*

Collective action frames and framing processes within social movements were theoretically developed in the 1980s, and an extensive literature applying many related concepts has ensued (Benford and Snow 2000). Elaborated from Goffman’s (1974: 21) use of frames to describe ““schemata of interpretation”” that enable individuals ‘to locate, perceive, identify, and label’ occurrences within their life space and the world at large,” collective action frames “are action-oriented sets of beliefs and meanings that inspire and

legitimate the activities and campaigns of a social movement organization” (Benford and Snow 2000: 614). Collective action frames permit social movement participants to orient to and interpret their social surroundings and thereby facilitate a shared understanding of those contexts, with the goal of mobilizing constituents, attracting sympathetic support, or countering the claims of their opponents (Snow and Benford 1988). Central to collective action frames are “core framing tasks” that facilitate a shared understanding of and response to a social problem. *Diagnostic framing* refers to identification of a social problem and attribution of blame or responsibility for that problem, while *prognostic framing* denotes the solution to that problem and strategies for action. A final core framing task, *motivational framing*, refers to the “call to arms” that incite activists to join the cause or take action (Benford and Snow 2000).

An examination of convergence and diversity in AAMs is enhanced by assessing the core framing tasks of diagnostic and prognostic framing. As argued above, AAMs share the broad belief that the status quo food system is harmful, and these movements have identified specific environmental, economic, and social problems it generates or exacerbates. Although causal attributions made by these movements and organizations within them may vary (from blaming U.S. agricultural policy or transnational corporate power or neoliberalism more generally), considered broadly, AAMs converge on a common diagnostic frame that the status quo food system is unsustainable (Constance et al. 2014a). Diversity is most clear in the myriad ways AAMs respond to this commonly perceived problem, both in terms of the topical issues they select and the strategies they employ for creating change. As a result, this diversity corresponds with a prognostic frame on which these movements have yet to find agreement (Constance et al. 2014a).

However, understanding more precisely the nature of prognostic frames across these movements can inform analysis of patterns of convergence and divergence, including issues that are both shared among some members in the movement family and others that are more divisive.

### *Organizations and Organizational Fields*

Applications of collective action framing within social movements can suffer from reification, as scholars mistakenly comment on the framing “movements” do: “Social movements do not frame issues; their activists or other participants do the framing” (Benford 1997). As a result, social movement organizations (SMOs) are an important unit of analysis for social movement scholarship, as they both harness extant social movement resources and are social movement resources in and of themselves. McCarthy and Zald (1977: 1218) define SMO as a “complex or formal organization which identifies its goals with the preferences of a social movement or countermovement and attempts to implement those goals.” These organizations are important “mobilizing structures” that facilitate collective action and exploit political and institutional openings to further movement goals (McCarthy 1996: 141). Analysis of social movement organizations lends itself to interpreting how material and human resources are mobilized, purpose and identity is created, alliances are formed, and ideology and action are framed to sustain movement activities (McAdam and Scott 2005: 8).

Organizational field-level approaches to understanding social movements offer several advantages for studying social movements and organizational populations, including the important process of bounding the field of action (Minkoff and McCarthy 2005). Scott (2004: 9) defines organizational field “as a collection of both similar and

dissimilar interdependent organizations operating in a functionally specific arena together with their exchange partners, funding sources, and regulators.” A key to this definition is that it broadens the level of analysis beyond social movement organizations themselves to include the larger field of actors and institutions that exert influence. Also, the field is diverse with both “similar and dissimilar” organizations, but also converging in that they operate in a “specific arena together,” suggesting a shared interest or issue-focus, what I have deemed a social movement family. Building from Zurcher and Curtis’ (1973) notion of multiorganizational field, Klandermans (1992) specifically noted that opponents are key players in the organizational field, so individual organizations in the field contend with both supportive and conflictual entities. As a result, SMOs are challenged to frame collective action with diverse targets in mind, aiming for alignment and cohesion with some but counter-framing and differentiating from others (Evans 1997). Further complicating organizational fields, some organizations “may only be *partially* concerned with the ‘common substantive interest’ that drives a particular social movement, but nevertheless active in the field or linked to active organizations in ways that shape the focal organizations” (McCarthy and Minkoff 2005: 291, emphasis mine). This is particularly evident in cases of social movement “spillover” when organizations from different movements overlap and influence each other’s frames, strategies, recruitment, and mobilization (Meyer and Whittier 1994).

Analysis of AAMs’ issue convergence and diversity is particularly conducive to a field-level organizational approach. First, much AAM analysis has proceeded at the conceptual level, noting differences and similarities across movements without systematic attention to the broad set of agrifood organizations that populate these

movements. This is not to suggest that organizations have been ignored in AAM research, but instead they have often been described individually within case studies of specific movements and initiatives, not comparatively or across the AAM family. Case studies of individual movements have been invaluable for understanding the history, accomplishments, and potential of these movements. However, to understand patterns of convergence and divergence *across* these movements, the richness and complexity of this AAM family requires more inclusive, systematic empirical investigation. As noted by Obach (2015:85) in his case study of the organic agriculture movement, “virtually all movements are actually composed of subgroups differentiated on the basis of a wide range of social positions, identities, and ideologies” (citing Van Dyke and McCammon 2010). Understanding patterns of convergence and divergence requires attention to these organizations and their subgroups, and a multi-organizational field approach broadens the scope to provide a clearer picture of the AAM family.

### *Issue Orientation*

To investigate multi-organizational fields effectively, analysts must begin with a “descriptive step” to understand which organizations are the key players in the field and what connects and separates them (Minkoff and McCarthy 2005: 291). This step determines boundaries within the field by clarifying which indicators describe the field, with issue orientation emerging as a primary mechanism for bounding organizational fields (Lune 2010: 126). By issue orientation, I refer to the mix of substantive topics that can define an organizational field, which can be broad (e.g., civil rights, pro-life, anti-war) or more specific policy items or sub-issues within movement categories, corresponding closely to diagnostic and prognostic frames that define a problem and



solution. Often movements and the organizations that comprise them are multi-issue, marked by the diversity in prognostic frames that must be negotiated and articulated within a field. For example, in the U.S. labor movement the American Federation of Labor and Congress of Industrial Organizations were initially separate entities split by differing policy agendas, only merging once the issue focus was broadened to facilitate convergence (Cornfield and McCammon 2010). The environmental movement is also illustrative, as the large number of environmental problems presents numerous potential issues to address (Johnson 2006). Comprised of organizations focused on either “traditional” environmental issues of conservation or “new” issues associated with environmental quality or multi-issue organizations emphasizing a mix of both types of issues, the latter, issue-diverse organizations have been shown to correspond with more effective political outcomes (Johnson 2008). Others have argued that favorable outcomes emerge when issues are framed specifically (e.g., Cress and Snow 2000), but in ways that resonate broadly to encourage organizational and public support (McCammon 2001), further suggesting the importance of issue focus. Beyond outcomes, issue orientation among SMOs is an important factor in coalition formation, as work on multiple issues can facilitate these opportunities (Van Dyke 2003). However, issue diversity within movements can also lead to frame disputes among organizations and factions that undermine more widespread mobilization (Benford 1993).

Similar to environmental problems spurring action in the environmental movement, the problems posed by the status quo agrifood system are multi-faceted and numerous, suggesting a large number of movement issues potentially pertinent to AAM organizations. As suggested above, some AAMOs employ a multi-issue prognostic

frame, identifying several specific issues that their movement and other AAMs aim to address. In addition, the agrifood issues selected within these movements are not only addressed by AAMs; some topics may also fit the agendas of other social movements and organizations not easily categorized as belonging to AAMs in a spillover process (Meyer and Whittier 1994). For example, agri-environmental issues within AAMs have historically attracted interest from mainstream environmental movement organizations, yet it would be inaccurate to collapse both sets of organizations into a cogent movement since there are also many issues on which they do not overlap (Buttel 1997). This example demonstrates the difficulty of bounding AAMOs. A field-level approach focused on the issues organizations select, regardless if they might self-identify with or fit a priori descriptions of AAMs, presents a clearer picture of patterns of convergence and diversity, particularly what I refer to as *issue*, as opposed to *movement* convergence and divergence.

Thus far, I have argued that AAMs converge on a shared diagnostic frame that the status quo food system is problematic and diverge in prognostic solutions to this problem, broadly oriented to the issues taken up across AAMs. However, the literature also points to potentials for convergence across AAMs and their organizations within the prognostic framing of issue selection. For example, this issue convergence is evident among organizations that may focus on both local food systems development and anti-GMO stances or intersections of sustainable agriculture and diet-related health. In other words, many AAMOs are not single-issue organizations, and casting them as belonging to separate movements within an overlapping family may muddy the ways the issues they select converge.

### *Mesomobilization Potential*

When organizations demonstrate convergence in issue orientation (or shared prognostic frames) within the varied organizational field, they present what Gerhards and Rucht (1992) refer to as *mesomobilization potential*. As opposed to investigating individual organizational processes that mobilize individual activists (micromobilization) or social movements as a whole (macromobilization), mesomobilization accounts for organizations that mobilize other organizations, broadly understood as coalitions. Mesomobilization potential identifies the potential organizations that can be integrated via collective processes for two purposes to facilitate greater influence: a) collecting and sharing material and human resources and b) developing shared collective action frames. The notion of *potential* is important at the meso-level, since even when organizations identify with the same issues, they do not necessarily form active coalitions (Van Dyke and McCammon 2010: xvii; e.g., Lichterman 1995; Roth 2010).

Particular to AAMs, several scholars have called for more robust coalitions and alliances to guide these movements in a collective project, essentially collapsing the family of movements into a more integrated singular movement effort (e.g., Buttel 1997; Friedland 2008; Hassanein 2003; Holt Gimenez and Shattuck 2011). For example, Buttel (1997: 357) noted: “The future of agricultural sustainability movements will thus lie in the nature and extent of coalitions they are able to form with other movements and groups,” highlighting an “omnibus coalition” across the labor, environmental, and sustainable agriculture movements that sought to stop passage of the North American Free Trade Agreement in the early 1990s. Though the coalition ultimately failed when several environmental organizations capitulated, the example is illustrative of both

mesomobilization potential and issue convergence, since it was around a specific issue that agreement and action was initially framed. AAMs are not devoid of coalitional efforts to effect change, as noted by Obach (2015: 82-85) in his discussion of the coalition of environmental, sustainable agriculture, and consumer groups that mobilized concerning the Organic Foods Production Act of 1990. At time of writing (2015), many of these groups remain part of a viable, interconnected constituency, as reflected, for example, in the work of the National Sustainable Agriculture Coalition to present a united front addressing germane agricultural issues (Obach 2015: 83, 236, Hunt 2016; see also Allen 2004: 194).

Furthermore, the broad collection of AAM issues and their interpretation may facilitate coalition-building, but such loose framing may mitigate pragmatic gains toward specific objectives (Allen 2004: 192). In summary, coalitions in AAMs can form around specific issues or sets of issues that appeal to multi-issue organizations, although tensions within and across movements may challenge their development. Mesomobilization potential is useful for clarifying which organizations, across which shared issues, could potentially align to stimulate broader mobilization on these issues. The field-level approach, bringing into the analysis a full range of national-level organizations that subscribe to or oppose AAM issues, situates this mesomobilization potential within the broader agrifood organizational field. This approach treats ideas of a status quo-alternative binary as an open empirical question. Therefore the first research question addressed by this study is the following:

**Research Question 1: *What are the patterns of issue orientation within the larger national agrifood organization field?***

- a) *Do patterns of issue orientation support assumptions of a binary status quo-alternative divide among agrifood movement organizations?***
- b) *To what extent do patterns of issue orientation indicate convergence, divergence or both among national alternative agrifood organizations?***

*Resources and Strategies*

Within social movements, resource mobilization scholars have been particularly attendant to the material and human resources organizations gather to support their mobilization efforts (see McCarthy and Zald 1977). Access to material resources is important for maintaining organizational viability; without funds to support organizational needs for supplies, office space, paid staff and other needs, SMOs will struggle to advance their goals (Cress and Snow 1996). The size of operating budgets and the number of staff size therefore represent common measures of organizational resources (e.g., Martin 2008; Walker and McCarthy 2010; Minkoff et al. 2008). Other important resources include the different types of contributions that organizations receive including foundation grants, government grants, or program revenues through services provided and membership dues, that in quantity and timing may influence organizational viability (Walker 1983). Scholars have also investigated how organizational age constitutes a resource that would influence prospects for survival and viability, but results have been inconclusive, suggesting either a liability of newness as originally proposed by Stinchcombe (1965), while others have found more complicated patterns across varying organizational types (Hannan 1998).

Additional resource considerations overlap with the political opportunities approach that views organizational prospects as dependent on access to the political structure (Tarrow 2011: 165-167). Both political lobbying in general and federal election campaign donations specifically require organizational resources that may influence political outcomes in certain contexts, though much ambiguity besets this literature (Hojnacki et al. 2012; Baumgartner and Leech 1998: 120-140). An additional resource consideration particular to AAMs is whether organizations receive financial support from agrifood corporations. As noted above, a key critique of the status quo agrifood system is the consolidation of power and influence afforded these firms in a global neoliberal food regime (Friedmann 2005; McMichaels 2005). One way these firms may influence organizations is through grant and membership support from their deep pockets, which may give organizations stability, but may also encourage particular stances or positions.

In addition to gathering resources to mobilize action, organizations also employ various strategies in pursuit of their goals. These strategic choices can help SMOs overcome resource limitations and influence success and failure (Ganz 2000). Strategies are conditioned by the field-level dynamics organizations encounter and how they vary across movements and contexts (Fligstein and McAdam 2011). Meyer and Staggenborg (2008) operationalize several categories of strategy variables including *arenas of conflict* (or target selection), as organizations select action settings in which they have opportunities to advance their goals. For AAM organizations, several arenas are likely to inform strategy, including the federal political arena (see Browne 1988; 1995; Mooney and Majka 1995; Lehrer 2010). Corporate firms are also a potential target given the criticism by AAMOs of the power imbalances favoring agrifood corporations in the

status quo food system (see McMichael 2005; Friedmann 2005). In addition, the marketplace more generally is a potential arena of conflict for agrifood organizations (as well as more status quo trade associations), as many AAMs are market-oriented and emphasize developing new market venues or changing market relations (Constance 2014a; Harrison 2011: 155; Obach 2015: 15; Allen and Hinrichs 2007; Guthman 2008).

Arena selection informs tactical choices, as particular settings are conducive to specific tactics, which are often described as either institutional (“insider”) or direct action (“outsider”) (Meyer and Staggenborg 2008). The former includes tactics that seek influence through conventional normative practices such as lobbying, letter-writing, and litigation, while the latter emphasizes disruption, often in the form of protest demonstrations, boycotts, and marches (Meyer and Staggenborg 2008). Additional tactics general to SMOs include service provision, which does not confer an institutional challenge and instead seeks to aid a population of interest in some way (Minkoff 1993). As shown by Minkoff (1999; 2002), organizations often employ multiple tactics and strategies that differentially affect their mobilization and survival. Within AAMs, political consumerism suggests another tactic in the form of consumers exercising politically-motivated choices in their purchasing decisions with the intent of effecting change (Michelletti and Stolle 2007; Stolle et al. 2005; Johnston 2008).

Membership structure is further strategic choice of organizations; choices to have individual dues paying members, organizational or institutional members, or affiliate or federated structures that decentralize the organization into sub-units can influence resource capture and mobilization (Skocpol 2003; Minkoff et al. 2008). An additional strategic consideration is the types of constituents an organization represents, sometimes

distinguished by direct beneficiaries who gain from movement mobilization and conscience constituents who support the movement without directly benefitting (McCarthy and Zald 1977; Snow and Soule 2010: 94). Among agrifood organizations, constituent categories include public citizens and consumers; private firms; scientists, researchers, and medical practitioners, government employees and agencies, community-based organizations and schools, and farm producers. Finally, as evident in the agrifood movement literature, many organizations such as environmental movement organizations, consumer groups, or animal rights activists are involved in these AAMs, but may not specifically prioritize agrifood issues (see Buttel 1997; Obach 2015: 20). This distinction between primarily agrifood organizations and organizations secondarily interested in agrifood issues is important, as movements can benefit from resources, activists, and strategies acquired from other movements to increase their collective influence through social movement spillover (Meyer and Whittier 1994).

Taken in combination, both resources and strategies likely vary across agrifood organizations based on their different issue orientations, and this variation has implications for mesomobilization potential. Resources are particularly linked to mesomobilization potential, and without common strategies, mesomobilization potential will be limited. Also, patterns of convergence and divergence among AAMOs likely extend beyond issue selection, and the research proceeds to identify resource and strategic patterns as well.

**Research Question 2:** *How do differences in organizational resources and strategies correspond to the mesomobilization potential of agrifood organizations within the field?*



## *Outcomes*

Once patterns of issue, resource, and strategic convergence and divergence are identified, this research further seeks to understand how those patterns affect AAMO political influence within the field. Analyzing political outcomes is particularly challenging for students of social movements, as these consequences are not directly controlled by the focal social movement organization(s) and even when stated goals are not attained, beneficial outcomes may have emerged (Amenta et al. 2010). As a result, selecting a measure for “outcome” is a particular challenge as precise measures like law passage not only make it difficult to isolate social movement causality but also present a high threshold for what constitutes success. Seminal work by Gamson (1990: 28-37) distinguished outcomes as either *acceptance* or *new advantages*. Acceptance considers if organizations are validated as spokespeople for the issues in question, while new advantages point to the difficult to measure benefits the organization or movement attained. Focused at the organizational level, this research explores how issue orientation predicts acceptance in the form of giving testimony at Congressional hearings, as these hearings are associated with policy action (Baumgartner and Mahoney 2005). Research on Congressional hearing access has shown that organizations with more resources overall testify more frequently (Albert 2013; Leyden 1995), and resources specific to lobbying and political campaign contributions have correlated with this form of acceptance (Leyden 1995).

**Research Question 3:** *How does issue orientation influence a national agrifood organization’s likelihood of gaining acceptance from national political decision makers?*

## Conclusion

The growing literature on AAMs has asserted their broadly shared critique of the status quo agrifood system, and suggested diversity in how AAMs respond to that critique. AAMs fit the notion of a social movement family that shares certain traits, but is not unified by a singular organizing framework among diverse organizations that mobilize action. Central to understanding the diverse mix of organizations within the AAM field are the specific issues these organizations subscribe to—what I’ve termed their issue orientation—which can clarify patterns of convergence and divergence within the AAM family. Although there are noted differences across movements in the literature, there has also been a tendency to project an “us vs. them” orientation, where AAMs are posited as a coherent, collective response to a monolithic status quo agrifood system. This research questions such a binary, and further identifies patterns of issue convergence and divergence across AAM organizations. AAMOs are expected to exhibit similarities and differences in their issue orientations that inform mesomobilization potential within the AAM field. In addition, issue orientation likely corresponds to differences in organizational resources and strategic choices that may influence the ability of these organizations to mobilize. Therefore, this research not only describes the organizational field, but also analyzes if and how issue orientation corresponds to resource mobilization and strategic decisions. How issue orientation, resources, and strategies correlate with acceptance of organizations in the AAM field, operationalized as giving testimony at Congressional hearings, is a final area of inquiry. The selection of organizations for study from the population of national-level agrifood organizations, and the measures and methods of analysis are described in the next chapter.

### 3 Research Methods

This chapter presents the research methods, sample and measures for the dissertation study. It describes assembly of a unique database of national agrifood organizations and presents the statistical procedures used to characterize the sample and examine relationships between theoretically relevant variables. The research used several statistical methods first to identify clusters of agrifood organizations by their *issue orientation*, the combination of issues the organization subscribes to, and subsequently to compare these clusters across a set of resource capacity and organizational strategy measures. Then, I applied these clusters to cross-sectional multivariate regression analyses to determine the effect of issue orientation on how frequently organizations submit testimony at Congressional hearings addressing any agrifood issues, as an operationalization of the acceptance organizations attain among political leaders.

I begin the chapter by describing the sample population of national-level agrifood organizations. I then review procedures for determining issue orientation clusters, beginning by describing 18 position (or issue) statement variables used to form the agrifood organizational clusters based on issue orientation. Next, I explain how this study used agglomerative hierarchical cluster analysis, the method applied to the problem of organizing the sample organizations into issue orientation clusters. I describe the study's use of comparison tests to contrast these organizational clusters across sets of resource and strategy variables, and specify how each variable was operationalized. I explain procedures and rationales for examining two sets of issue orientation clusters, a

three-cluster and a six-cluster solution to characterize national agrifood organizations based on the issues these organizations select as part of their activities and advocacy.

This chapter also describes procedures and approach for a statistical analysis modeling the influence of issue orientation on the number of Congressional hearings in which an organization has participated. This analysis applied a negative binomial regression method to account for the large variance in the dependent variable and adjusted for the use of count data, which is not normally distributed. I describe selection and measurement of both control and independent variables in the model and explain procedures for conducting two separate regression analyses, the first for the three-cluster solution and the second for the six-cluster solution.

### **Unit of Analysis and Sample Population: National Agrifood Organizations**

The unit of analysis in this research was individual, national-level not-for-profit organizations. Several criteria were established to assemble this sample. First, all study organizations were non-profit organizations, with the bulk of the sample comprised of 501©3, -4, and -6 organizations<sup>3</sup>. Interest group, advocacy, and social movement organizations are commonly registered as non-profit organizations with the federal government, and these types of organizations work in different ways to influence social and political change (Andrews and Edwards 2004). While there may be social movement and interest group organizations that are either for-profit or informally organized non-profit groups, systematic scholarship on social movement organizations typically centers

---

<sup>3</sup> These non-profit designations exempt organizations from paying federal income taxes under the Internal Revenue Code. 501©3 organizations are charitable organizations that serve public purposes broadly defined, including education, religious, and scientific, and social welfare interests, and donations to these organizations are also tax exempt. Their political lobbying and activities are limited. Private foundations are 501©3 organizations, but they do not file IRS 990 forms and were omitted from the research. 501©4 organizations are also termed social welfare organizations but donations to these are not tax exempt and they can freely operate for political purposes, including lobbying, political contributions, and endorsing candidates, and many trade associations file under this code. 501©6 is a special designation for business leagues, chambers of commerce, and boards of trade.

on non-profit organizations that file publicly-available tax forms with the federal government (e.g., Minkoff 1994, 1995; Walker and McCarthy 2010).

National-level organizations were selected for this study, because a systematic and comprehensive accounting of agrifood organizations and their patterns of issue orientations at the national level has received little to no empirical treatment and can inform understanding about their role and influence with respect to agrifood issues. Because national-level policies and politics shape structures, practices and opportunities in the agrifood system, and national-level organizations are actively mobilizing in the broad agrifood arena, it is reasonable to expect that some national organizations may be important drivers and resources in agrifood politics and change efforts. As with studies of other social movement organization populations (e.g., Johnson 2008; Minkoff 1994; 1995), national-level is defined here as organizations that work beyond the local or state level; this includes any multi-state organizations. There are some U.S.-based groups that can be considered international agrifood organizations by virtue of their programs and work. For this research, only U.S.-based organizations having at least some activities or programs focused within the U.S. geographically or politically were included. Some of these may be international organizations in that they have affiliates abroad or have international-scale activities, but for this research they were deemed national-level if they were based in the U.S. and engaged in U.S. agrifood system issues and politics.

The organizational sample was built from several data sources. First, topical searches were conducted in the online *Encyclopedia of Associations*, a database of non-profit organizations assembled and regularly updated by Gale Research Group. The *Encyclopedia* is a database of all known non-profit organizations in the U.S. organized by

subject area and scope (international, national, or local), and organizations are contacted annually to update their entries. Gale also attempts to identify new organizations and contacts them for inclusion in the Encyclopedia. As a result of these methods, the *Encyclopedia* list tends to undercount new organizations, as there is a lag between the founding of a new organization and Gale's ability to identify it and create a listing (Martin et al. 2006). Despite this limitation, the *Encyclopedia* is comprehensive and has been used as a primary data source in many analyses of organizational populations (e.g., Minkoff 1994, 1995, Johnson and Frickel 2011; Johnson 2008; McCarthy et al. 1996).

To build an initial sample of agrifood organizations, national scale organizations catalogued under the subject category "Environmental and Agricultural Organizations," and queries of 80 more specific agrifood-related subject descriptors were employed<sup>4</sup>. Using these methods, some organizations came up in an electronic search whose records showed no evidence of agrifood interests or work, verified by analyzing these organizations websites; they were removed. In addition, the international list was reviewed with the same search terms to identify any international agrifood organizations based in the U.S. and having U.S.-based activities for potential inclusion in the sample. At this stage, the list-building exercise was intentionally broad in an attempt to assemble a complete as possible sample of U.S. agrifood organizations. Unlike previous research that uses the *Encyclopedia* on topics such as environmental movement organizations (e.g., Johnson 2008) or civil rights organizations (e.g., Minkoff 1995), there is no single

---

<sup>4</sup> Search terms used with Encyclopedia of Associations: Agribusiness, agricultural development, agricultural education, agricultural engineering, agricultural equipment, agricultural science, agriculture, agroforestry, animal breeding, animal research, animal rights, animal science, animal welfare, apiculture, apple, aquaculture, baking, beekeeping, beverages, cattle, commodities, commodity exchanges, conservation, consumers, cooking, cooperative extension, cooperatives, dairies, dairy products, diabetes, dietetic products, farm equipment, farming, feed, fertilizer, fishing industries, food, fruits and vegetables, fungi, gastronomy, goats, grain, health, health food, herbs, horticulture, hunger, irrigation, livestock, meat, migrant workers, mills, natural resources, nutrition, nuts, obesity, oils and fats, organic farming, peanut, pest control, potatoes, poultry, poverty, produce, rangeland, rural development, seafood, seed, sheep, soil, soil conservation, soybeans, standards, sugar, sustainable agriculture, swine, tractors, trade, vegetables, vegetarianism.

subject term in the *Encyclopedia* that can gather a comprehensive list of agrifood organizations directly. Instead, organizations of interest for this research were spread throughout the database under a wide range of subject headings and descriptors.

In a process of comprehensive list-building and careful review of organizations, additional national agrifood organizations were added as found through other relevant sources and via snowball methods. Similar to the *Encyclopedia*, *Charity Navigator* and the *National Center for Charitable Statistics* provide databases of non-profits organizations searchable by subject area. Using the same food and agriculture keywords from the *Encyclopedia of Associations* search above, I searched these two databases for possible additional organizations meriting inclusion in the study sample. I also reviewed specific lists of agrifood organizations included on the websites of the Agricultural Marketing Resource Center<sup>5</sup>, National Sustainable Agriculture Information Service<sup>6</sup>, and the Congressional Hunger Center<sup>7</sup> to check for any organizations not found in prior sources. I also added many organizations to the study sample through an ongoing “snowball” process, namely by identifying new organizations listed on the websites of those groups already in the sample (often on a ‘links’ or ‘resources’ page), from coalition member lists, and included on group sign-on letters. Although snowball sampling can potentially introduce bias (Atkinson and Flint 2004), the purpose in developing this sample was to create as complete a list of national agrifood organizations as possible, where no such comprehensive list appeared to exist. In combination with the other list-building methods described above, the snowball method helped to create a more complete list of agrifood organizations.

---

<sup>5</sup> [http://www.agmrc.org/directories\\_\\_state\\_resources/related\\_directories/national-commodity-and-agricultural-organization-sites/](http://www.agmrc.org/directories__state_resources/related_directories/national-commodity-and-agricultural-organization-sites/)

<sup>6</sup> [https://attra.ncat.org/attra-pub/sustainable\\_ag/](https://attra.ncat.org/attra-pub/sustainable_ag/)

<sup>7</sup> <http://www.hungercenter.org/fellowships/partners/#DC>

Most of the organizations generated by these list-building methods have been classified as agriculture or food-related organizations in some capacity via the databases and organizations that assemble them. Not surprisingly, these organizations generally focused most of their advocacy and programs on agrifood topics. However, as social movements interact with other movements that “spill over” to influence each other (Meyer and Whittier 1994), we can expect that some organizations that do not *primarily* emphasize agrifood issues might still have stances or interests on some agrifood issues (NRC 2010:325). For this reason, organizations captured in the list-building from other topical areas, such as environmental protection and social welfare, were reviewed for the presence of agrifood positions and interests in the coding process.

In combination, these methods generated an initial total of 1,515 organizations for potential inclusion in the study. From this initial list, all organizations whose websites showed they were no longer in existence or focused their activities *exclusively* at the international, state, or local scales were removed (N=395). Of the remaining 1,120 organizations, each website was reviewed for evidence of position statements and issue foci on selected agrifood topics, and 339 agrifood organizations were removed from the sample that did not meet this criterion. Of these, one set (N=159) could be considered “internal” agrifood organizations whose purpose was largely education, networking, or developing standards internally within their particular sector of the agrifood system, but did not express external viewpoints on the 18 agrifood issues that were examined in this research (and described below). Agricultural fraternities and some trade associations like the Specialty Coffee Association are examples. A second set of promotional organizations (N=49) were removed when their purpose was *solely* to promote a



particular product or class of products. Examples include the American Pie Council and the Catfish Institute. Another set of 131 breeder organizations were removed whose purpose was to promote a specific breed of animal and provide education and networking opportunities related to these breeds, for example the Texas Longhorn Breeders Association. While each of these types of organizations have agrifood interests and activities, they were removed because they did not convey a viewpoint on any of the 18 agrifood issues included in the research in either their programs or position statements.

Each of the 780 remaining organizations fit the organizational sample by being a national-level organization with at least one position statement of the 18 selected issues. However, 90 additional organizations were also removed from the sample because they did not submit IRS 990 tax forms. Since key variables included in the analysis such as budget size are drawn from the IRS 990 tax form, it was necessary to remove organizations discovered to be for-profit organizations, religious charities not required to submit tax information, coalitions or groups sponsored by other organizations (therefore not required to submit tax forms), or small tax-exempt organizations that were not required to submit tax forms because their gross receipts were under \$50,000 for the year examined. After these various checks and screens, 690 organizations were retained for inclusion in the final study sample. The sample was compiled in 2013, and all organizations in the sample were in existence in the year 2013, as judged by evidence of an active website at that time. The Appendix includes a list of each organization in the sample, categorized based on methods described below.

## Issue Statements and Coding

All the organizations included in the study sample presented some indication of having a stance on one or more of the 18 agrifood issues examined in this research. Drawing from scholarship reviewed in Chapter 2 on alternative agrifood movements, I developed an initial list of potential issues prompting concern and contention and on which organizations' positions might be assessed. Through this preliminary coding of organizations, it became evident that some organizations in the sample also expressed stances on other distinct current agricultural and food topics related to specific policy measures under consideration within the federal government in the early 2010s. These additional issues were tracked, and when at least 20 organizations had a position on the issue, they were included. For example, one controversy in the run-up to the 2012 Farm Bill concerned proposed requirements that conservation thresholds be met in order for producers to qualify for Farm Bill programs, such as crop insurance. While not included in the initial coding scheme for issues, the conservation compliance issue was added to capture the fuller range of issues pertinent to agrifood organizations during the period of this study.

Ultimately, 18 agrifood issues were identified to evaluate agrifood issue positions of the 690 national organizations. These positions included stances both on general topics (e.g., food and farmworker rights, local food systems) and on recently contentious specific policies (e.g., the conservation compliance provision described above). Data on issue orientations were collected from the websites of each organization in the sample. Often organizations included a webpage listing "policy priorities" or "positions." In other cases, organizations included copies of letters they had sent to members of

Congress or federal agencies to express their viewpoints (often signed by other supporting organizations). In some cases, as with letters sent to Congress, the position statement could be associated with a particular date. In cases like these, only dated material from 2008 forward was used in assigning values for the issue orientation variables for any given organization, as 2008-2013 marks a full farm bill cycle, when many (but not all) agrifood issues are on the political agenda for organizations. Since these dated letters as far back as 2008 were still made available on the organizations websites, it is assumed the positions contained in them still held at the time of coding.

Eighteen issues were selected for this analysis to identify each organization's issue orientation, defined as the combination of issues they select in their programs and advocacy work, and these issues were coded as having either a supportive *or* opposing viewpoint. As described below, to conduct the analysis, these issues needed to be coded dichotomously (0,1), so the 18 issues initially yielded 36 dichotomous variables in the dataset to account for both support and opposition on each of the 18 issues. The organization could be either in support of the issue (coded '1' for support and '0' for opposition), oppose the issue (coded '0' for support and '1' for opposition), or make no statement on the issue (coded '0' for both support and opposition). In all cases when an organization's position on a given issue could not be determined or no mention of the issue was made, that issue was coded '0' to indicate neutrality or no evident position.

For four of the original 18 issues, no opposing viewpoint was detected, as no organizations clearly or openly expressed positions that were opposing these issues. For example, while some organizations expressed a positive stance regarding legislation or programs to support vulnerable farming populations like women and socially

disadvantaged producers, no organizations explicitly stated that they did *not* support these farmer populations or policy proposals meant to aid their development. Similarly, explicitly negative stances towards the Supplemental Nutrition Assistance Program (SNAP) and other federal entitlement programs, hunger relief efforts, and community food security models were not found for the study sample. Due to there being no opposing statement on these four variables, the 36 dichotomous variables were reduced to 32 total measures of issue orientation (14 issues x 2 = 28 + 4 issues without opposition measure = 32 total issue variables).

As described in Chapter 2, some agrifood issues closely align with viewpoints expressed within alternative agrifood movements. As opposed to assuming these viewpoints were indeed “alternative agrifood movement” positions among organizations, the dichotomous coding mechanism does not *a priori* place a value judgment on whether support or opposition of each issue casts the organization as part of those movements or opposed to them. Instead, the cluster analysis procedure (described below) groups organizations based on similarity of issue orientation, limiting assumptions that support or opposition for any particular issue constitutes a “status quo” or “alternative” viewpoint. This systematic approach allowed the researcher to evaluate issue orientation independently of preconceived notions that any one position on an issue or a combination of issues automatically connotes belonging to or opposing alternative agrifood movement viewpoints.

Each of the 690 organizations’ websites was reviewed for evidence of that organization’s position on the following agrifood topics and policies.

## *Issue Statements*

- 1) *Issue 1: Organic Agriculture and Chemical Regulation:* Coded as support if the organization generally endorsed practices consistent with organic agriculture, consumption of organic products, or stronger regulations for the National Organic Standards Board and coded as opposition if it favored fewer or less restrictive regulations. In addition, organizations received a support code when they favored stronger regulation of chemical and pesticide inputs in agriculture. Specifically, organizations were coded in support when they endorsed stricter regulations for the EPA's National Pollutant Discharge Elimination System (NPDES) permit program for pesticides and Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Organizations were coded in opposition when they opposed stronger regulation of these permits and rules.
- 2) *Issue 2: Farmland Preservation and Conservation:* Coded as support when the organization endorsed efforts to preserve and conserve farmland, both as open-space and working lands. This issue was also coded as support if there was encouragement for specific Farm Bill programs aimed at farmland protection and conservation such as the Conservation Stewardship Program and Environmental Quality Incentives Program. Only two organizations in the sample called for reductions in these programs, and they were coded as opposition on this issue.
- 3) *Issue 3: Climate Change Adaptation in Agriculture:* Coded as support if organizations made statements that agriculture bears some responsibility for

climate change and must adapt to better account for climate change impacts.

Organizations asserting that agriculture need not adapt to reduce the effects of climate change were coded as opposing this issue.

- 4) *Issue 4: Conservation Compliance*: Coded as support if organizations endorsed measures in the 2012 Farm Bill to require minimum standards of environmental protection and conservation to qualify for federal Farm Bill programs. Those explicitly opposing conservation compliance measures were coded as opposing this issue.
- 5) *Issue 5: Biotechnology*: Coded as opposition if organizations endorsed labeling, stricter regulations, or a moratorium on transgenic crops and foods and coded as support if organizations resisted these proposals. In addition, organizations opposed to irradiation and animal cloning for food products were also coded as opposition, with organizations supporting these practices as in support of the issue.
- 6) *Issue 6: Confined Animal Feeding Operations (CAFOs)*: Coded as opposition if organizations opposed or criticized CAFOs or called for stricter regulation of such operations. Those seeking less regulation of CAFOs were coded as support. Beyond general statements on CAFOs, positions on the EPA's National Pollution Discharge Elimination System permit for CAFOs were reviewed. In addition, organizations that opposed the use of subtherapeutic antibiotics and hormones in animal agriculture were coded as opposing CAFOs, and organizations stating the value and safety of subtherapeutic applications were coded as support.

- 7) *Issue 7: Agricultural Trade: Fair or Free Trade*: Coded as support for fair trade if organizations articulated support of fair trade practices and principles. In addition, organizations that expressed negative viewpoints on international free trade agreements such as the Trans-Pacific Partnership were coded as supporting fair trade. Organizations that endorsed less restrictive international trade in food and agricultural products including free trade agreements were coded as supporting free trade.
- 8) *Issue 8: Country of Origin Labeling (COOL)*: Coded as support if organizations endorsed mandatory COOL and coded as opposition if organizations were against this policy.
- 9) *Issue 9: Grains, Inspections, Packers, and Stockyards Administration (GIPSA) Rule*: The GIPSA rule regulates and monitors unfair and anti-competitive practices within the animal agriculture sector, as these industries are vertically integrated and consolidated across the supply chain, and therefore susceptible to monopolistic business practices. Coded as support if organizations called for a stronger GIPSA rule and coded as opposition if they opposed stricter interpretation of the rule.
- 10) *Issue 10: Tester Amendment*: The Food Security Modernization Act (FSMA) was a much contested agrifood issue during the study period; as part of that omnibus legislation, the “Tester Amendment” was proposed to exempt direct market and small farm operations from the new FSMA rules. Organizations that supported the Tester Amendment were coded as such, and those against the amendment were coded as opposition.

- 11) *Issue 11: Local Food Systems*: Coded as support if organizations endorsed programs and policies to increase the viability of local food systems, including voicing support for farmers markets, community-supported agriculture, farm-to-school programs, and other direct marketing schemes. A support code was assigned for evident support of local food-related programs in the Farm Bill. Only two organizations were coded as opposition on this issue, based on their statements that reliance on local food systems fosters instability within the agrifood system.
- 12) *Issue 12: Vulnerable Farmer Support*: Coded as support if organizations endorsed programs intended to aid and develop new and beginning farmers, women farmers, and/or historically socially-disadvantaged agricultural producers, such as farmers of color. This code was assigned for evident support for the Farm Bill's Beginning Farmer and Rancher Development Program. This was one of four issues where no organizations were coded as opposition.
- 13) *Issue 13: Food and Farmworker Labor*: Coded as support if organizations explicitly sought to improve the wages, safety, and/or rights of food or farmworkers, including policies that protect these workers. Organizations that endorsed less strict regulation of hiring and worker treatment were coded as opposition. Endorsement of the Agricultural Guest Worker Act, intended to replace the H-2A agricultural worker program without granting citizenship to agricultural laborers, was also coded as opposition and statements against this legislation were coded as support for food and farmworkers.



- 14) *Issue 14: Federal Food Entitlement Program Support: Supplemental Nutrition Assistance Program (SNAP) and Other*: Coded as support if organizations endorsed funding for SNAP and other federal food entitlement programs at current or increased levels. As no organizations in the sample explicitly supported reductions in federal entitlement food programs, this issue had no opposition code.
- 15) *Issue 15: Hunger Relief*: Coded as support if organizations operated or supported programs aimed at supplying emergency food relief to U.S. residents. This included both day-to-day food aid via services like food pantries and food donations to targeted regions following natural disasters. No organizations were coded as opposing this issue.
- 16) *Issue 16: Community Food Security*: Coded as support if organizations endorsed a community food security approach to addressing hunger and/or supported the USDA's Community Food Project Grants program in the Farm Bill. No organizations were coded as opposing this issue.
- 17) *Issue 17: Healthier School Food*: Coded as support if organizations endorsed the Healthy, Hunger-Free Kids Act of 2010 and other policies aimed at improving the nutritional quality of foods in schools, including the USDA's Fruit and Vegetable Pilot Program. Only three organizations were coded as opposing this issue based on expressed resistance to increased regulations and spending by schools that might be associated with these programs. Organizations that sought to remove vending machines were also coded as supporting this issue.

18) *Issue 18: Obesity and Diabetes Reduction*: Coded as support if organizations endorsed policies, projects or activities aimed at improving public nutrition to reduce incidence and impact of obesity and type-2 diabetes. Several organizations that opposed regulation of soft drinks and sugary snacks were coded as opposing this issue.

### **Cluster Analysis of Organizations**

The purpose of the cluster analysis procedure was to group cases based on shared issue statements within the data to produce categories of issue orientation among national-level agrifood organizations. There are many cluster analysis procedures available to categorize groups of cases, with each producing a potentially different result. Agglomerative hierarchical cluster analysis is the most common procedure (Tan et al. 2006: 517) and was selected for this analysis for several reasons. First, unlike K-means clustering, hierarchical clustering algorithms are useful when the research problem does not offer a pre-set number of clusters, as is the case here. Second, hierarchical clustering produces a series of clusters or partitions, as opposed to just one solution, so it is beneficial when the researcher aims to understand categorizations at multiple levels. The clustering algorithm proceeds in stages with a new number of clusters being produced at each stage, such that the final solution demonstrates how cases are nested into clusters and sub-clusters. Hierarchical methods offer a straightforward approach to identify an initial cluster solution for all national agrifood organizations in the sample, and to determine further divisions or sub-clusters of this data.

Agglomerative, as opposed to divisive, hierarchical clustering begins by treating each individual case in the data as its own cluster, which in in this study would be 690

clusters of one case each. In the first stage, the two most similar cases are clustered together to form  $n-1$ , or 689 total clusters. In the next stage, either a third case is added to the initial two-case cluster or it is clustered with the other most similar singular case in the dataset. With each successive step, either individual cases are grouped to form a new cluster, individual cases are added to existing clusters, or two existing clusters are grouped together. This procedure continues until the final stage when all cases are grouped together into one cluster, such that there is one cluster with 690 cases included. For this reason, it is the researcher's responsibility to interpret the best number of clusters for her or his research problem, as many solutions are possible.

The hierarchical clustering procedure requires the researcher to make two important decisions based on the structure of the data being analyzed. Since the goal of the analysis is to form similar groups of organizations, a criterion to statistically evaluate which cases are similar and dissimilar from one another is required. While Euclidean distance and squared Euclidean distance are commonly applied to continuous variables to form distance matrices, categorical data requires different measures to match cases. To simplify this matching process, all issue variables were coded into dichotomous variables, 32 in all (14 issues with both supporting and opposing viewpoints; 4 with a supporting viewpoint). Binary categorical data requires methods to match cases based on presence (coded '1') or non-presence ('0') of variables used to form the clusters, in this case whether or not each organization had a position on each agrifood issue. Many distance measures are available to select for binary data, and a primary distinction between them is the treatment of conjoint absences (Everitt et al.: 46). While it is clear that when two organizations share an issue statement (i.e., they are both coded '1' on the

same issue), they are similar, an important distinction is whether to treat mutual non-agreement (both cases coded '0' on the same issue) as relevant. For this data, given the large number of variables applied to the clustering procedure and the resultant large number of potential 0-0 combinations, a distance measure that ignores conjoint absences was selected.

For example, if one organization's only issue statement is support for fair trade and a second organization's only issue statement is support for free trade, the resulting comparison would show large scale agreement on all other issues, since each organization would be coded '0' for all other variables, despite their opposing stance on trade. Without removing conjoint absences, the clustering procedure would view these organizations as quite similar, even though logically we know that not to be the case. The Dice coefficient (also called Czekanovsky-Sorenson or Sorensen-Dice index) specifies

$$\textit{Similarity} = 2a / (2a + b + c)$$

where  $a$  = conjoint presence (1,1) and  $b$  and  $c$  both equal mismatch (0,1; 1,0) (Dice 1945; Sorensen 1948). The formula differs from a simple matching coefficient by not including conjoint absence in the equation. In addition, unlike Jaccard's coefficient which also omits conjoint absences in matching data, the Dice coefficient double weights conjoint presence. In other words, the Dice index emphasizes similarity among cases as opposed to treating similarity as equally weighted with dissimilarity. As a result the Dice coefficient, theoretically, better demonstrates case similarity while also not ignoring mismatched pairs, and the purpose of this analysis was to highlight similarity, or conjoint presence, among the cases. Practically, clustering results comparing Jaccard's and Dice

coefficients are similar in many cases, as was the case in this analysis when both were tested, and both methods are acceptable when omission of conjoint absences is desired (Duarte et al. 1999; Dalirsefat et al. 2009).

In addition to selection of a distance measure, hierarchical clustering requires selection of a clustering algorithm to determine which clusters are merged at successive steps. The distance measure provides a way of determining similarity among the cases and the cluster algorithm then fuses these cases and groups of cases together into clusters, and several options are available. This research applied group average linkage techniques (Sokal and Michener 1958). This clustering algorithm defines distance between two clusters as the average distance between all the cases in each cluster, so with larger datasets like this research, it avoids “chaining” effects in which individual cases are added to one large cluster at each successive step, eventually producing an illogical conclusion where cluster solutions include individual cases as their own cluster. Group average linkage avoids this tendency in large datasets by clustering based not on the relative distance of one individual case within a cluster (either nearest or farthest neighbor) but the average distance of all the cases within the cluster (see Everitt et al. 2010: 79). Nearest and farthest neighbor approaches were considered with this data, but chaining effects made them uninterpretable, so group average linkage was selected.

As stated above, hierarchical clustering is intended to provide a nested structure of the data, but the procedure does not indicate a definitive answer regarding the “right” number of clusters for the data array. Although methods have been suggested for choosing the number of clusters in hierarchical clustering, there is little consensus about the best approach and a method preferred in one project may perform poorly in another

(Everitt et al. 2010: 96). As a result, heuristic (versus statistical) procedures are the most common method, including visual inspection of the cluster dendrogram, but this approach is prone to bias (Aldenderfer and Blashfield 1984: 54). In a meta-analysis of applications of hierarchical clustering in the strategy and management disciplines, Ketchen and Snook (1996) found that the most common approach to the problem was to investigate change in the agglomeration coefficient, the numerical distance coefficient at each step in the procedure at which cases merge to form clusters. Where the largest changes in the agglomeration schedule are observed, more dissimilar clusters are being merged, so the optimal cluster solution is deemed the number of clusters at the prior step. When several larger increases in the cluster solution are observed, the interpretation is that there is more than one interpretable cluster solution in the data (Ketchen and Snook 1996; Aldenderfer and Blashfield 1984: 56). This was the case in this research, and two different cluster solutions, one with three clusters and the other with six, were chosen for further investigation. Further discussion on this rationale will be elaborated in Chapter Four. The hierarchical cluster analysis and all other statistical procedures described below were conducted using SPSS v22 and v23 statistical software.

### **Cluster Comparisons of Resource and Strategy Measures**

This research included two sets of cluster comparisons—one for the three-cluster and another for the six-cluster solution—to clarify differences across the categorizations of national agrifood organizations on a series of resource and strategy variables. Welch’s ANOVA, Pearson’s Chi-Square, and Kruskal-Wallis H tests were applied to compare clusters across the resource and strategy variables described below. Different comparison tests were necessary based on both the types of variables (nominal vs. continuous) and

distributions of the quantitative variables. The skewed distribution of the resource variables required comparisons with the non-parametric Kruskal-Wallis H test, as ANOVA's assumption of normality was violated, and Kruskal-Wallis H tests are a suitable non-parametric equivalent to ANOVA (Corder and Foreman 2014: 117). This test adjusts for skewness by assessing the distribution based on median ranking of the cases, as opposed to item means, which helps account for outliers in the distribution. Since Kruskal-Wallis H is an omnibus test, post-hoc comparisons were performed (also using Kruskal-Wallis H) to identify source categories for significant differences across the groups. The Bonferroni correction (Holm 1979) was applied to minimize the error inflation that occurs when conducting multiple pairwise comparisons for the same variable.

Unless otherwise noted, the organizational resource data was collected from the organization's self-reported IRS 990 tax form. When possible, data was drawn from the 2011 IRS 990 form, but in cases when a 2011 version was not available, the 2010 form was chosen. If neither of these was available, but a 2012 form was accessible, the 2012 form was used. Although some variation can be expected across each tax year, the researcher determined it was preferable to include the 2010 and 2012 tax years as opposed to removing these organizations from the analysis by only including the 2011 data, since this decision retains 54 organizations in the analysis that otherwise would have been removed due to their not filing 2011 990 forms.

### *Resource Variables*

- 1) *Age*: The founding date of the organization subtracted from 2014, the year this analysis was conducted. Organizations report their founding date on their IRS

990; when this information was omitted from the form, the organization's website was consulted.

- 2) *Budget*: The organization's reported operating budget.
- 3) *Total Contributions*: The amount of reported dollars the organization received from external sources for the year, which includes the sum of contributions from individual donors and grants from both private sources and the government.
- 4) *Government Contributions*: The amount of dollars the organization reported from government sources in the given tax year, which is a sub-component of total contributions.
- 5) *Non-Government Contributions*: The amount of dollars the organization reported from individual donations and grant awards, which is a sub-component of total contributions.
- 6) *Program Revenue*: The amount of dollars the organization received through services rendered, membership dues, conferences, and other income generating activities *not including* grant-making and individual donations.
- 7) *Staff Total*: The number of full-time staff employed by the organization in the given tax year.
- 8) *Dollars per Staff Ratio*: This measure scales the total number of staff based on the operating budget of the organization.
- 9) *Lobbying Expenses*: Each organization's lobbying expenditures were collected from the U.S. Senate's lobbying disclosure database for 2011 and 2012, and the total for both years was summed. Since some organizations may vary lobbying



activity by year, choosing two years of expenditure should be a more accurate representation of lobbying expenses.

10) *Federal Election Contributions*: Data on each organization's donations for federal political candidates was collected from the Federal Election Commission database, including PACs when the organization had one. This data is organized by election cycle. This variable was measured as the combined total of the 2009-10 and 2011-12 cycles. In addition, individual donations of more than \$200 from organizations' executives are catalogued by the Center for Responsive Politics and are also included in this figure for both election cycles, although these totals were relatively minimal in comparison. Similar to lobbying expenses, two years were chosen to provide a more accurate assessment of political donations.

11) *Fortune 500 Agrifood Company Support*: Whether or not the organization has paying members or listed donors that are among 55 agrifood-related Fortune 500 companies and their foundations from the year 2013. These companies were selected when listed market sectors on their websites included agrifood production, distribution, or retailing.<sup>8</sup>

All resource variables were compared across agrifood clusters using the non-parametric Kruskal-Wallis H test, with two exceptions. Age is normally distributed and was compared using a Welch ANOVA test, as Levene's test for homogeneity of variances

---

<sup>8</sup> The 55 agrifood-related Fortune 500 companies were: AGCO, Air Products & Chemicals, Archer Daniels Midland, Ashland, Campbell Soup, Caterpillar, Celanese, CF Industries Holdings, CHS, Coca-Cola, Coca-Cola Enterprises, ConAgra Foods, Core-Mark Holding, Corn Products International, Cummins, Darden Restaurants, Dean Foods, Deere & Company, Dole Food, Dow Chemical, Dr. Pepper Snapple Group, DuPont, Eastman Chemical, Ecolab, General Mills, Great Atlantic & Pacific Tea, Heinz, Hershey, Hormel Foods, Huntsman, J.M. Smucker, Kellogg, Kraft Foods, Kroger, Land O' Lakes, McDonald's, Momentive Specialty Chemicals, Monsanto, Mosaic, Nash-Finch, PepsiCo, Publix Super Markets, Safeway, Sara Lee, Seaboard, Smithfield Foods, Starbucks, Supervalu, Sysco, Target, Tyson, Walmart, Whole Foods Market, Winn-Dixie Stores, Yum Brands.

was rejected. Fortune 500 Support was coded as a binary dummy variable, so it was compared using a Pearson's chi-square test.

### *Strategy Variables*

In addition to these resource variables, a series of measures were selected to compare organizational strategies across the cluster solutions. These binary categorical variables were coded by the author based on examination of the organization's website conducted between October 2013 and September 2014<sup>9</sup>. Presence of each trait or condition is coded '1' and non-presence coded '0.' Subsequent comparison tests of these variables were conducted using Pearson's Chi-Square tests, including post-hoc comparisons for significance. These variables fit four general categories: tactics, arenas, membership structure, and adherents. However, one additional strategy measure is:

- 1) *Primary Agrifood Focus*: Evaluates if the organization's primary purpose is focused on agrifood issues or, alternatively, if agrifood issues are of secondary interest to the organization. When the organization's mission was exclusively focused on agrifood topics or agrifood issues were discussed as top priorities, the organization was coded as a primary agrifood organization. Coding this variable was usually possible after examining the mission statement of the organization.

### **Tactics**

- 1) *Political Advocacy Tactics*: Evaluates if the organization uses letter writing, direct meetings, litigation, and educational outreach tactics to have influence.

---

<sup>9</sup> The three membership structure variables below were coded by a research assistant with my oversight. This procedure is further described in the data quality section below.

Information for coding this variable could often be found on the organization's webpages describing its activities and programs.

- 2) *Direct Action Tactics*: Evaluates if the organization uses protest, boycotts, and other forms of direct action to create change. When website content promoting or mentioning participation in these activities was found, the organization was coded as having direct action tactics.
- 3) *Political Consumerism Tactics*: Evaluates if the organization promotes purchasing or consuming of specific agrifood products as a form of social action. In many cases, information to support coding this variable was found in recommendations made about ways individuals could support agrifood change.
- 4) *Programs and Services*: Included as a tactic, this variable accounts for organizations that offer social and other technical support services directly to clients. This measure was typically coded from the section of a website listing activities and programs.

## **Arenas**

- 1) *Policy Arena*: Assesses if the organization seeks to have influence within the federal policy domain. This condition is present when the organization targets its activities at the federal political system (or State) in some way; information to guide coding decisions was often found in the mission statement or description of activities.
- 2) *Private Sector Arena*: Assesses if the organization seeks to influence change among private firms and businesses. This condition is present when the

organization targets its activities at a specific company or set of companies and is often found in website sections describing campaigns and programs.

- 3) *Marketplace Arena*: Assesses if the organization seeks to influence change within the marketplace generally, including buying and selling more of a specific products or set of products. This variable is often coded from the mission statement of the organization or activities and programs section of the website.

### **Membership Structure**

- 1) *Institutional Membership*: Whether or not the organization allows other organizations, such as other non-profit organizations or for-profit businesses, to become members. When organizations have a membership webpage, this information is described there.
- 2) *Individual Membership*: Whether or not the organization allows individuals to become a paying member of the organization. When organizations have a membership webpage, this information is described there.
- 3) *Federated and Affiliate Structure*: An organizational form in which the national organization has affiliates, chapters or some other type of sub-national organizational units at the regional, state, or local levels through which information, responsibility, and/or membership is channeled. This variable is coded positively whenever affiliates and chapters were listed on the website.

### **Adherents**

- 1) *Public Adherents*: Indicates whether the organization endorses actions, accepts donations and membership, or seeks to represent views from private citizens

generally, as opposed to those from a specific industry sector or profession. This information is often coded from website sections with titles like “who we are,” “who we serve,” as well as the mission statement. Also, organizations with a “donate” webpage available to anyone are coded to have public adherents.

- 2) *Private Firm Adherents*: Indicates whether the organization endorses actions, accepts donations and membership, or seeks to aid or represent for-profit businesses or specific industry sectors. This information is often coded from website sections with titles like “who we are,” “who we serve,” as well as the mission statement.
- 3) *Science, Research, and Medical Profession Adherents*: Indicates whether the organization endorses actions, accepts donations and membership, or seeks to aid or represent these professions. This information is found similarly to private firm adherents described above.
- 4) *Government Adherents*: Indicates whether the organization endorses actions, accepts membership, or seeks to aid or represent government units, offices and employees. This information is found similarly to private firm adherents described above, and examples include professional associations like the National Association of State Departments of Agriculture.
- 5) *School and Community-Based Non-Profit Adherents*: Indicates whether the organization endorses actions, accepts membership, or seeks to aid or represent schools, teachers, students, or community-based organizations. These adherent populations are grouped together based as representing community stakeholders,

both in the form of schools and community-based organizations. This information is found similarly to the adherents described above.

- 6) *Grower Adherents*: Indicates whether the organization endorses actions, accepts membership, or seeks to aid or represent agricultural producers. This information is found similarity to the adherents described above.

Results of cluster comparisons across all 28 resource and strategy measures are presented and described in Chapter Four to show how different clusters of agrifood organizations, constructed based on their issue statements, do and do not differ from each other.

Profiles of each cluster describing their issue orientations, resources, and strategic orientations are presented to create a comparative descriptive account of the agrifood organizational field. Additional analyses tested how these categorizations of agrifood organizations correlate with a specific outcome variable—the frequency at which each organization provides testimony to Congress on agrifood issues. In the next section, I describe the methods for this phase of the research project.

### **Regression Analysis: Testimony at Congressional Hearings**

This research incorporates regression analyses to test how issue orientation (as derived via the cluster analysis described above) influences how frequently organizations appeared before Congress to give testimony at agrifood-related hearings. Since organizations must be invited to provide this testimony, this dependent variable can be viewed as indication of an organization's ability to acquire acceptance in pursuit of their political interests. Two separate analyses are included, one for the three-cluster and another for the six-cluster solution, each testing four different models with different arrays of control variables.

### *Sample*

For both analyses, organizations that were coded as not targeting the policy arena (see Arena, 1 above) were removed from the dataset. Since it is likely that only those organizations that have a goal of influencing federal policy would receive invitations to give testimony, removing those organizations that lack a strategy of engaging the policy arena provides a more targeted sample population. As a result, N=576 for this analysis.

### *Dependent Variable: Number of Hearings*

The dependent variable in this analysis is the number of hearings to which the organizations submitted testimony from 2009-2014. This six year time period was selected because it spans the Farm Bill cycle and includes three different Congresses, minimizing the possibility that the party make-up of the Congress could influence the number of hearings in which an organization appeared. Witness lists and hearing transcripts were selected for inclusion from the Proquest Congressional database, which includes information on all Congressional hearings, including those that are unpublished by the Government Printing Office, so it is a superior data source than the latter. Two criteria were used to select hearing testimony to code into the dataset. First, all organizational testimony from hearings that included agrifood issues were selected for inclusion. Second, all appearances by organizations coded as primary agrifood organizations (see Strategy Variables above) were included, even if the topical matter of the hearing was not specifically on agrifood issues. In these rare latter cases, the hearings were often tangentially related to agrifood issues, such that perspectives from agrifood organizations were solicited even if the hearing itself was not agrifood specific.

Examples include a Senate hearing on industrial energy efficiency or House hearings on water supply and restoration issues in which representation from the farm sector was included in testimony even though these were not agrifood hearings per se. With respect to the first criterion, 46 topical search terms intended to fully capture all the agrifood-focused hearings were selected from Proquest's database to produce a list of hearings to be scanned for witness testimony<sup>10</sup>. With respect to the second criterion, the database was searched by the name of each primary agrifood organization in the dataset (N=396) to locate any additional hearings that included testimony by agrifood organizations in the dataset. Those organizations not coded as primary agrifood organizations were not searched for by name, but when they appeared in agrifood-oriented hearings, their participation in hearings was included in the dataset.

To locate organizations that provided testimony, the Table of Contents on official hearing transcripts was consulted, including any organizations that only provided written comments for the record but did not appear in person. Sometimes, letters of support or disagreement were submitted by collections of organizations to include in the public record, but these documents and the organizations that signed them were not coded into the dataset, as these forms of participation differ from invited testimony. Finally, when federated or state affiliates of national organizations testified, they were coded as representing the national organization, under the basis that the mission, goals, and views of affiliates likely aligns with, or in some cases is managed by their parent organizations (Grossman and Rangan 2001). Across the six-year timespan, 321 hearings included at

---

<sup>10</sup> Agricultural: commodities, education, extension, finance, industries, labor, machinery, marketing, pests, policies, production, research. Animals, appropriate technology, chambers of commerce, conservation and natural resources, consumers, environmental pollution and control, farms and farmers, fish and fishing industry, food supply, forests and forestry, global climate change, horticulture, irrigation, land grants, land use, landscape protection, marine resources, marketing, mills and milling, occupational health and safety, organic farming and gardening, packaging, plant nurseries, production capacity, productivity, public health, retail trade, rural conditions, rural cooperatives, statistical data (agriculture), trade associations, water supply and use, wetlands, wholesale trade,



least one witness organization from the dataset. This included 221 hearings in the House of Representatives, 98 Senate hearings, and 2 joint hearings. Ninety-five hearings were held by either the House or Senate committees on agriculture or subcommittees within their agriculture committees. Natural resource and various environment subcommittees were responsible for another 64 hearings, and the remaining hearings were hosted by a mix of committees and subcommittees including regulatory affairs, small business, health, consumer protections and others.

*Independent Variable: Agrifood Issue Orientation*

The independent variable in this analysis is the dummy variable of agrifood issue orientation as calculated by the cluster analysis procedure described above. This variable tested if belonging to any of the specific issue orientation categories corresponds with greater likelihood that an organization will have offered testimony before Congress either on agrifood issues or as an agrifood organization on a non-agrifood issue. In other words, this variable will show if certain collections of agrifood movement organizations, classified by their positions on 18 different agrifood issues, have greater access to the Congressional hearing process, which in this analysis corresponds to increased acceptance among policy decision-makers.

The initial cluster analysis produced three categories, and the group identified as Status Quo agrifood organizations serves as the reference category. The two other issue orientation groups are Nutrition and Food Access and Alternative agrifood organizations (described in Chapter Four). The second analysis includes six clusters instead of three, also drawn from the hierarchical procedure of the full sample of 576 organizations. In this solution, the above Nutrition and Food Access group is split into Food Access and

Diet-Related and Community Food Security clusters. The Alternative agrifood cluster from above is split into three sub-clusters, labeled Anti-Industrial Agri-Technology, Environmental agrifood, and Broad-Spectrum Alternative agrifood organizations. The original Status Quo agrifood cluster remains intact in the six-cluster solution. In essence, this second analysis recasts the data into more specific issue orientation categories as determined by the hierarchical clustering procedure, such that instead of comparing Status Quo agrifood organizations to two other issue orientation categories, the comparison is between Status Quo organizations and five issue orientation groupings.

### *Control Variables*

Only the independent, dummy-coded variable for issue orientation (cluster) was changed in each of the two regression analyses. Two sets of control variables were included in both analyses to ensure the effects of the issue orientation clusters are not intertwined with other organizational traits that may influence the frequency with which organizations are invited to give Congressional testimony. One set of control variables primarily measures resource variables, and the second set focuses on the strategies of the sample population of organizations. Beginning with the entire list of resource and control variables applied in the cluster comparisons, tests for multicollinearity were conducted to remove all conflating variables.

The selected control variables for resources largely followed scholarship within resource mobilization theory and research on social movement organizations, which asserts that organizations with more robust resources are better able to mobilize social movement activity and gain influence. The resource variables in these models were described in the cluster comparison section above, but the list was shortened to minimize

multicollinearity, as several of those measures were highly correlated. Also, given the skewed distribution of some of these variables, the natural log function was employed to not violate assumptions of normality. Resource measures in the regression analyses include: operating budget (log), lobbying expenditures (log), federal election contributions (log), staff, age, and a dummy variable for Fortune 500 agrifood company support.

Strategy control variables were also selected to account for the different tactics, membership structures, and adherents of each organization in the sample. Again, these controls were a condensed list of those employed in the cluster comparisons described above, with variables omitted when multicollinearity was identified. Controlling for whether the organization is primarily an agrifood organization was important since these organizations likely had an advantage in the witness selection process. The tactical control variables included: direct action, political consumerism, programs and services, and targeting private firms. Membership structure variables included both the individual and institutional membership measures, as well as the federated/affiliate variable. A final set of strategy controls corresponded with each of the six adherent categories described above: general public (citizens and consumers); private firms; science, research, and medical professionals; government entities; schools and community-based organizations, and grower adherents.

### *Data Analysis*

Since the dependent variable in the analysis is count data, the regression models required methods that account for this specific type of distribution. Negative binomial regression models are preferred for analyzing count data when the variance of the

dependent variable is greater than the conditional mean, known as overdispersion, as is the case in this analysis (Simonoff 2003: 147-155). The mean number of hearings attended for the entire population analysis is 1.77, with a variance of 28.24 which occurred because the data was heavily skewed toward the right, as the values centered heavily around 0 with a smaller number of organizations having a larger number of total hearings attended.

For both regression analyses, four models were tested. First, a base model of the relationship of issue orientation on number of Congressional hearings attended with no controls was shown. Second, I produced a model that included the independent issue orientation variable with only the resource controls, followed by a third model showing only the independent variable with strategy control measures. The fourth and final model in each analysis was the full model with the independent variable and both sets of resource and control variables.

### *Missing Data*

Although missing data was not detected in gross quantities for the regression analyses, listwise deletion would have removed 56 cases, about 10 percent, from the analyses. Since listwise deletion can produce biased estimates by removing potentially important cases (Graham 2009), multiple imputation methods were applied to retain all cases. Imputation works by creating plausible predicted values for missing values, or imputations, based on relationships among the non-missing values in the dataset iterated repeatedly from randomly selected similar cases (Allison 2002: 85). In this singular form, imputation artificially reduces standard error rates since missing values fit a precise regression line, but this problem is overcome by the multiple imputation procedure,

which conducts the imputation procedure multiple times and averages the outcomes for a better, more accurate result. Developed over the past 25 years, multiple imputation is a widely accepted method for handling missing data; Graham (2009: 559) summarizes: “The point of this process is not to obtain the individual values themselves. Rather, the point is to plug in these values (multiple times) in order to preserve important characteristics of the data set as a whole” (Graham 2009: 559). In this case, listwise deletion was analyzed and produced similar results to the imputed data set. However, the multiple imputation method retains all cases and was applied to the regression analyses in Chapter Six.

### **Data Quality**

I trained two research assistants to support the data entry for this research. One assistant entered seven resource measures drawn directly from IRS 990 tax forms, and the second coded and entered the three membership structure variables from organizations’ websites. In each case, 70 of the 690 cases (approximately ten percent) were reviewed for each of the ten variables entered by research assistants. Among the seven resource variables, only four errors were found from reviewing this data entry. The coding of the three membership structure variables required additional oversight from the author, since the procedure required the assistant to interpret the membership type of each organization. To assure the reliability of this membership coding, the research assistant was instructed to reserve judgment on any questionable variables for the author, which occurred among 18 of the 690 cases. All remaining variables were coded and entered by the author. In addition, the author systematically scanned each variable across the entire dataset as part of a data cleaning exercise to check for potential errors, such as outlier

numbers. When unusual outliers were discovered, the author referred back to the original data (either IRS tax forms or organizational websites) to verify the accuracy of the data.

Coding of organizational issue statements was carried out exclusively by the author. As described above, in most cases, this coding was straightforward based on the presence or absence of a stated position on a particular policy initiative, and often organizations were explicit in their positions on the issues coded in the dataset by listing them in a “position statement” document or webpage or by providing letters they wrote or signed endorsing their positions. However, when an organization’s position on an issue required additional interpretation, a website search on the issue was conducted to seek additional information from the organization to better clarify its position, and additional materials (such as newsletters, blogrolls, and Facebook pages) were reviewed in attempts to triangulate the data. In cases when the organization’s position was still unclear at this juncture, it was coded ‘0’ as non-presence or neutrality on the issue. This approach was intentionally cautious, and the author chose to omit an issue from an organization’s profile rather than potentially include a false-positive.

## **Conclusion**

This research employed quantitative methods to: identify clusters of national agrifood organizations based on relationships between their patterns of issue orientations; compare these organizational clusters on a set of independent resource and strategy measures; and test if, controlling for resources and strategies, these issue orientations predicted how often an organization provided testimony at Congressional hearings related to agrifood issues. In the next three chapters, results from these analyses are presented. Chapter Four presents and discusses findings from the procedure that produced clusters

of agrifood organizations based on their issue orientations, including both a three-cluster and six-cluster solution. Chapter Five presents and discusses cluster comparisons for the three-cluster and the six-cluster solution across resources and strategy measures. Chapter Six presents and discusses results from the regression analyses on Congressional hearings, including separate models for the three-cluster and six-cluster solutions of national agrifood organizations.

## 4 Cluster Analysis of National Agrifood Organizations

This chapter presents findings aimed at addressing the first research question: *What are the patterns of issue orientation within the national agrifood organizational field?* Alternative agrifood movements have been framed as responses to perceived threats within the status quo agrifood system (Hinrichs and Eshleman 2014; Constance 2014a), and this chapter systematically categorizes organizations across the national agrifood organizational field based on the combinations of issues they subscribe to, what I have termed *issue orientation*. Evidence of robust convergence among AAMs would be demonstrated by a binary result producing status quo agrifood organizations on one hand and alternative agrifood organizations on the other, separated from each other by divergent issue orientations, but individually held together by shared issue orientations. However, results from hierarchical cluster analysis based on issue statements yield a three-cluster solution, which I categorize as Status Quo agrifood, Alternative agrifood, and Nutrition and Food Access clusters of organizations based on the issues most dominant in each cluster.

Hierarchical clustering procedures by definition yield a range of possible solutions, and I argue that statistically a complementary six-cluster solution meaningfully provides additional detail about the national agrifood organizational field. In this solution, patterns of issue diversity among the Alternative agrifood and Nutrition and Food Access clusters are shown via additional clusters that resulted from the original three-cluster solution. This six-cluster solution leaves intact the original Status Quo agrifood cluster, and five sub-clusters are shown to comprise the Alternative agrifood and Nutrition and Food Access clusters identified in the three-cluster solution: Anti-Industrial



Agri-Technology, Environmental agrifood, Broad-Spectrum Alternative agrifood, Food Access, and Diet-Related and Community Food Security organizational clusters.

In this chapter, I begin by presenting the results of the hierarchical cluster analysis, including a brief discussion on the selection of three and six clusters for further analysis. Subsequently the three-cluster and six-cluster solutions are analyzed with particular attention to the issues most common in each cluster. The chapter concludes with a discussion to highlight patterns of convergence and diversity in issue orientation among national agrifood organizations.

### **Hierarchical Cluster Analysis of Agrifood Organizations Based on Issue Orientation**

As described in Chapter 3, each organization's issue orientation was evaluated on 32 dichotomous variables that each characterized a position on a timely agrifood issue. Not surprisingly, the distribution of these issues varied widely, ranging from only two organizations holding anti-farmland preservation and anti-local food systems viewpoints to 232 that supported federal food entitlement programs, or 34 percent (see Table 4-1).

Overall, the sample averaged 3.6 issues per organization, and even the most common issue was only taken up by about one-third of the organizations in the sample. Although these findings indicate that organizations selected relatively few issues, the cluster procedure centralizes how organizations overlap across the issues in the dataset, so even when a singular issue was taken up by relatively few organizations, the connection between that issue and others selected by those organizations contributed to the cluster solution.

*Table 4-1: Frequency and Percent of Total Number of National Agrifood Organizations Coded for Each Issue Statement, N=690*

<b>Issue Statements</b>	<b>Frequency of Total Number of Organizations</b>	<b>Percent of Total Number of Organizations N = 690</b>
<b>Mean Number of Issues/Organization</b>	<b>3.6</b>	<b>-</b>
Anti-Local Food Systems	2	0.29%
Anti-Farmland Preservation	2	0.29%
Anti-Healthy School Food	3	0.43%
Anti-GIPSA Rule	6	0.87%
Anti-Obesity and Diabetes Reduction	21	3.04%
Anti-Food and Farmworkers	28	4.06%
Climate Change, No Adaptation	38	5.51%
Anti-Tester Amendment	39	5.65%
Hunger Relief	43	6.23%
Anti-COOL	47	6.81%
Anti-Conservation Compliance	50	7.25%
Pro-Tester Amendment	52	7.54%
Pro-CAFO	56	8.12%
Anti-Chemical Regulation	56	8.12%
Pro-GIPSA Rule	59	8.55%
Fair Trade	65	9.42%
Anti-Biotechnology	67	9.71%
Pro-COOL	70	10.14%
Pro-Conservation Compliance	82	11.88%
Climate Change, Adaptation	92	13.33%
Vulnerable Farmer Support	92	13.33%
Free Trade	98	14.20%
Anti-CAFO	102	14.78%
Pro-Biotechnology	109	15.80%
Pro-Food and Farmworkers	109	15.80%
Community Food Security	117	16.96%
Pro-Organic and Chemical Regulation	130	18.84%
Pro-Farmland Preservation	150	21.74%
Pro-Obesity and Diabetes Reduction	153	22.17%
Pro-Local Food Systems	162	23.48%
Pro-Healthy School Food	167	24.20%
Food Entitlement Program Support	232	33.62%

A key challenge for hierarchical cluster analysis is to identify an interpretable number of clusters best characterizing the structure of the data. As described in Chapter 3, I applied the common heuristic method of looking for the greatest change in the agglomeration coefficient between clusters, selecting the solution prior to the largest change in agglomeration coefficient between clusters (Ketchen and Shook 1996). Because similarly large changes in agglomeration coefficients were observed at two levels, two clusters were chosen as representative of the data. Both the three- and six-cluster solutions emerged as solutions using this heuristic method, as two similarly large changes were observed between clusters three and two (.056 difference) and between six and five (.060 difference) (see Table 4-2).

*Table 4-2: Differences in Agglomeration Coefficients for Hierarchical Cluster Analysis of National Agrifood Organizations*

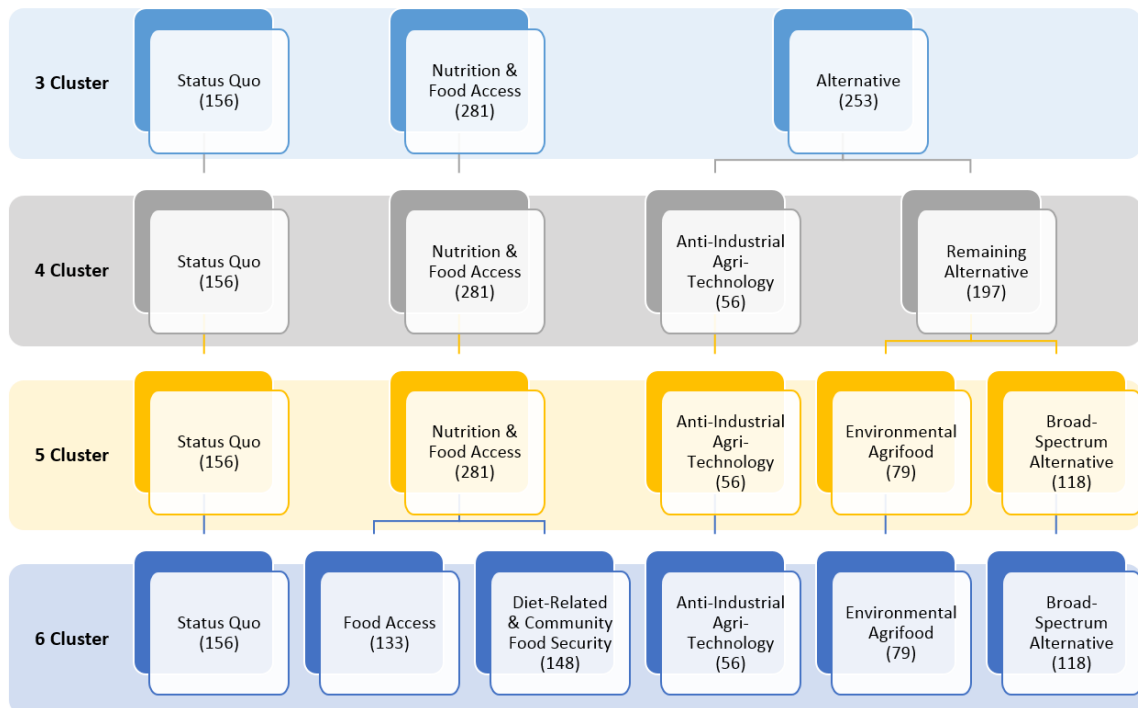
<b>Number of Clusters</b>	<b>Coefficient</b>	<b>Difference</b>
8	0.373	0.011
7	0.362	0.008
6*	0.354	0.060*
5	0.294	0.020
4	0.274	0.038
3*	0.236	0.056*
2	0.181	0.049
1	0.131	

*\*Highest difference between clusters, shown at previous step as indicator of heuristically best solutions.*

The three-cluster solution placed the organizations into broader descriptive categories to compare them. The six-cluster solution further parsed the organizations into smaller clusters distinguished by more specific, yet still coherent issue orientations. Agrifood movement scholars often refer to specific movements within the alternative agrifood movement family such as the local food or fair trade movement among others

(e.g., Constance et al. 2014a; Wright and Middendorf 2007). The six-cluster solution categorized organizations not based on over-arching movement headings, but instead on the combinations of issues, or issue orientations, to which each organization subscribes. Both the three- and six-cluster solutions are shown in Figure 4-1, which also includes the in-between clustering steps between these two solutions, as the hierarchical clustering procedure produced a singular new cluster at each successive level in the hierarchy. However, as described above, the three- and six-cluster solutions were deemed most meaningful based on heuristic methods, and in the next section I describe key issue orientation patterns that comprised the three-cluster solution; subsequently I provide a similar analysis of the six-cluster solution.

*Figure 4-1: Hierarchical Clusters of National Level Agrifood Organizations, N=690*



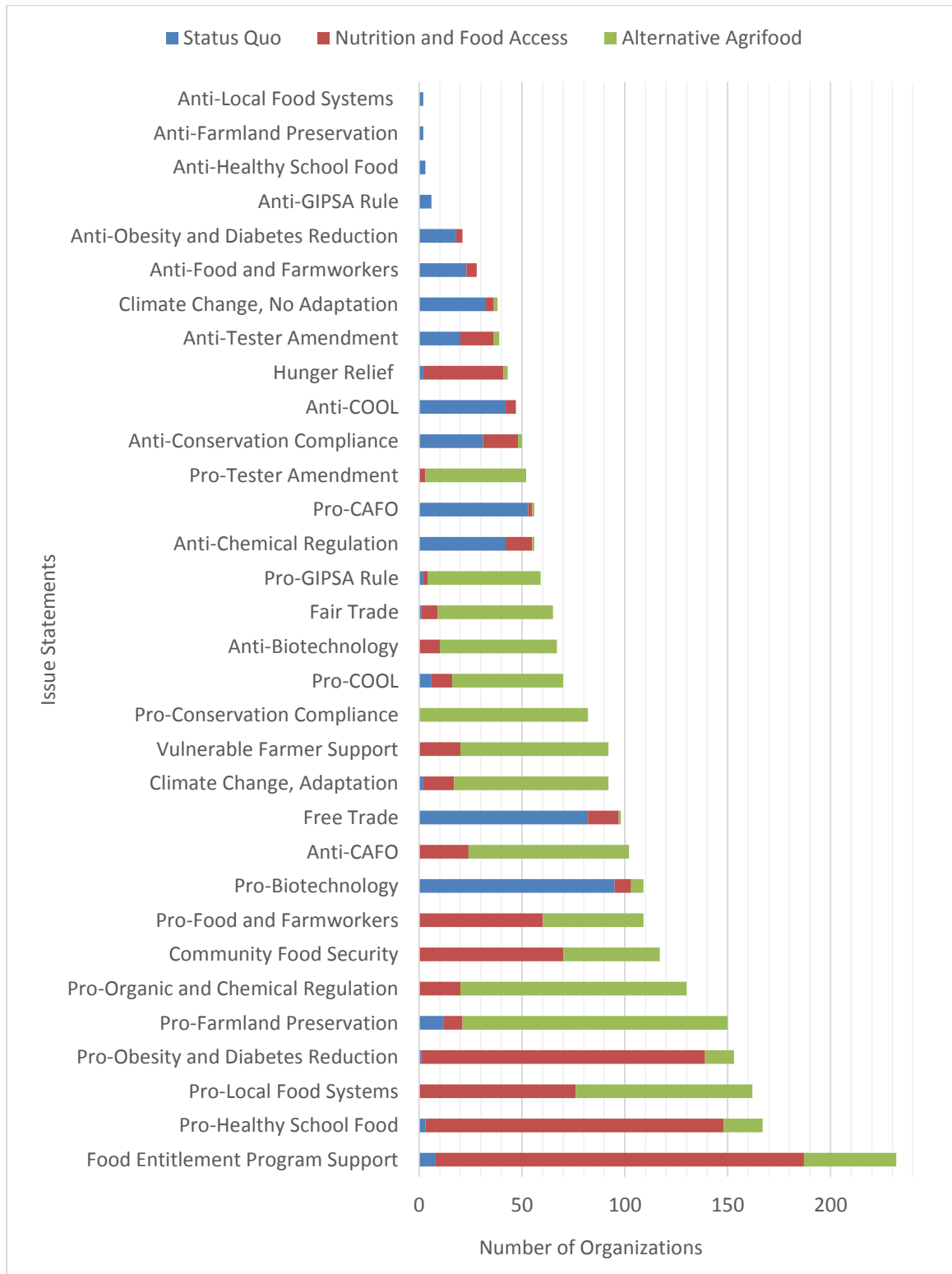
### *Three-Cluster Solution*

The three-cluster solution produced categories of 156, 253, and 281 organizations. By examining the distributions of agrifood issues within each cluster, the data shows which issues were most common in each of these three clusters, suggesting patterns of issues that overlap to demonstrate convergent agrifood issue orientations within clusters. In each cluster, there were multiple, generally related issues that “carried” the cluster in the highest proportions (see Table 4-3 and Figure 4-2), but since all issues across the dataset appeared infrequently, no single issue in any of the clusters was represented above 64 percent. Table 4-3 and Figure 4-2 show the proportion of organizations within the cluster that subscribed to each issue. Based on the predominance of specific issue orientations in each, I labeled the three organizational clusters: 1) *Status Quo agrifood*, 2) *Alternative agrifood*, and 3) *Nutrition and Food Access*.

*Table 4-3: Issue Statements of National Agrifood Organizations for Three-Cluster Hierarchical Solution, Frequencies and Within-Cluster Proportions, Sorted by Overall Issue Frequency*

Issue Statement	Status Quo Agrifood N = 156		Nutrition and Food Access N = 281		Alternative Agrifood N = 253	
	Frequency	%	Frequency	%	Frequency	%
<b>Mean Number of Issues/Organization</b>	<b>3.1</b>		<b>3.3</b>		<b>4.3</b>	
Anti-Local Food Systems	2	1%	-	-	-	-
Anti-Farmland Preservation	2	1%	-	-	-	-
Anti-Healthy School Food	3	2%	-	-	-	-
Anti-GIPSA Rule	6	4%	-	-	-	-
Anti-Obesity and Diabetes Reduction	18	12%	3	1%	-	-
Anti-Food and Farmworkers	23	15%	5	2%	-	-
Climate Change, No Adaptation	32	21%	4	1%	2	1%
Anti-Tester Amendment	20	13%	16	6%	3	1%
Hunger Relief	2	1%	39	14%	2	1%
Anti-COOL	42	27%	5	2%	-	-
Anti-Conservation Compliance	31	20%	17	6%	2	1%
Pro-Tester Amendment	-	-	3	1%	49	19%
Anti-Chemical Regulation	42	27%	13	5%	1	0%
Pro-CAFO	53	34%	2	1%	1	0%
Pro-GIPSA Rule	2	1%	2	1%	55	22%
Fair Trade	1	1%	8	3%	56	22%
Anti-Biotechnology	-	-	10	4%	57	23%
Pro-COOL	6	4%	10	4%	54	21%
Pro-Conservation Compliance	-	-	-	-	82	32%
Climate Change, Adaptation	2	1%	15	5%	75	30%
Vulnerable Farmer Support	-	-	20	7%	72	28%
Free Trade	82	53%	15	5%	1	0%
Anti-CAFO	-	-	24	9%	78	31%
Pro-Biotechnology	95	61%	8	3%	6	2%
Pro-Food and Farmworkers	-	-	60	21%	49	19%
Community Food Security	-	-	70	25%	47	19%
Pro-Organic and Chemical Regulation	-	-	20	7%	110	43%
Pro-Farmland Preservation	12	8%	9	3%	129	51%
Pro-Obesity and Diabetes Reduction	1	1%	138	49%	14	6%
Pro-Local Food Systems	-	-	76	27%	86	34%
Pro-Healthy School Food	3	2%	145	52%	19	8%
Food Entitlement Program Support	8	5%	179	64%	45	18%

Figure 4-2: Issue Statements of Nat'l Agrifood Organizations for Three-Cluster Hierarchical Solution, Sorted by Overall Issue Frequency



## Status Quo Agrifood

The first cluster of 156 organizations is comprised of organizations with status quo agrifood viewpoints. Within the cluster, support for biotechnology and free trade were most common, as over half of organizations subscribe to one or both of these issues (61 and 53 percent respectively). Over one-third supported CAFOs, and over one-quarter opposed either chemical regulation in agriculture and/or Country-of-Origin labeling (COOL). In addition, compared to other issues represented in the cluster, relatively high proportions of organizations opposed climate change adaptation in agriculture (21 percent) and conservation compliance policies (20 percent), as well as opposing food and farmworker justice (15 percent), the Tester amendment (13 percent), and obesity and diabetes reduction policies (12 percent). In contrast, many of the contra-positions on these issues were not held by any of the organizations within the cluster. Taken together, this cluster demonstrated viewpoints across agrifood production, trade, ecological, social justice, and health issues that align with the status quo agrifood system as described in the academic and activist literature (e.g., see Constance et al. 2014a for overview). Sample organizations in this cluster include the American Farm Bureau Federation, large trade and producer associations like the American Soybean Association and National Pork Producers Council, and other groups that represent different business interests including the U.S. Chamber of Commerce and Biotechnology Industry Organization.



## **Alternative Agrifood**

The second cluster of 253 organizations features organizations with issue orientations generally opposite of those that characterize the Status Quo agrifood cluster, which corresponds to an alternative agrifood issue orientation. As shown in Table 4-3 and Figure 4-2, over half of these organizations supported farmland preservation, and another 43% advocated for organic agriculture or increased agri-chemical regulation. Support for local food systems, the conservation compliance policy and climate change adaptation, as well as opposition to CAFOs characterized at least 30 percent of the cluster population. An additional nine issues were represented among 18 to 28 percent of the organizations in the cluster, and in total, the issue orientation of the cluster aligned with many movements described in the AAM literature, including the organic agriculture (e.g., Obach 2015), local food (e.g., Mount et al. 2013), anti-CAFO (e.g., Constance et al. 2003), anti-biotechnology (e.g., Schurman and Munro 2010), fair trade (e.g., Jaffee 2007), and farmworker justice (e.g., Harrison 2011) movements. The cluster demonstrates convergence around many AAM issues, so I have labeled it the Alternative agrifood cluster. Reflecting these broader issue areas, organizations in this cluster include the American Farmland Trust, Humane Farming Association, Chesapeake Bay Foundation, Environmental Working Group, and Organic Consumers Association.

## **Nutrition and Food Access**

In addition to the juxtaposed Status Quo and Alternative agrifood clusters, a third cluster of 281 organizations was evident in the data, converging around an issue orientation emphasizing Nutrition and Food Access (see Table 4-3 and Figure 4-2). Of

organizations in this cluster, 64 percent supported federal food entitlements, followed by 52 percent in support of healthier school food and 49 percent with obesity and type-2 diabetes reduction goals. However, several additional issues that appeared with a relatively high frequency in the Nutrition and Food Access cluster—support for local food systems (27 percent), community food security (25 percent), and food and farmworkers (21 percent)—also appeared in moderately high proportions in the Alternative agrifood cluster, demonstrating that these issues cannot be simply confined to a single cluster, but instead act as “bridge” issues *across* clusters. I elaborate on bridge issues later in the Discussion section of this chapter.

Importantly, the organizational population in the Nutrition and Food Access cluster also demonstrated that the primary issues of federal entitlement support, healthier school food, and obesity and diabetes reduction conjoined with other issues that could be characterized as either Status Quo or Alternative. Whereas the Status Quo and Alternative agrifood clusters demonstrated high levels of categorical opposition on the dichotomously coded issues (e.g., pro-biotechnology and anti-biotechnology), the Nutrition and Food Access cluster showed patterns of both supporting *and* opposing viewpoints on a number of issues, although the proportions are relatively small within the whole cluster. These issues include free and fair trade, COOL, biotechnology, organic agriculture, and climate change adaptation, as shown in Table 4-3. This finding suggests that stances on Nutrition and Food Access that are central to this cluster cannot easily be pushed into either status quo or alternative agrifood paradigms. In other words, this three-cluster solution for the 690 national agrifood organizations revealed a middle space of agrifood issue interest and emphasis, where similar (though small) proportions of

Nutrition and Food Access organizations presented either “for” or “against” positions on a number of issues. However, this cluster was most strongly characterized by support for policies and programs to bolster food entitlements and strengthen food access and nutrition. Examples of organizations included in this cluster were the American Diabetes Association, Consumers Union, Feeding America, Kids Against Hunger, and the National Center for Farmworker Health.

In summary, the three-cluster solution for all 690 organizations created categories of Status Quo, Alternative agrifood, and Nutrition and Food Access organizational populations to characterize the field of national agrifood organizations based on their issue orientations. Issue statements on agricultural trade, production, and environmental positions generally separated into either the status quo or alternative grouping, as the distributions of the diametrically opposed categories showed in Table 4-3 and Figure 4-2. A third cluster emerged that included organizations with viewpoints primarily on nutrition and food access issues, and some of these organizations had additional viewpoints that aligned with positions strongly evident in either the Status Quo or Alternative agrifood clusters. However, several issues including support for local food systems, community food security, and food and farmworkers were shown to have relatively equal frequency between the Alternative agrifood and Nutrition and Food Access clusters.

A significant benefit of applying hierarchical cluster analysis procedures is the ability to analyze cluster solutions at different levels. Additional sub-clusters help to clarify the structure of the data with the potential to show more precise similarities and differences in issue orientation across the organizational population. In this research,

based on the agglomeration coefficients at each level of the hierarchical analysis, the six-cluster solution presents an alternate representation of the data from the three-cluster solution. In the following section, I analyze this six-cluster solution which presents a sub-clustering of the Alternative agrifood and Nutrition and Food Access clusters.

### *Six-Cluster Solution*

The results of the six-cluster solution showed that the Status Quo agrifood cluster from the three-cluster solution remained intact at the six-cluster level. As a result, the emergence of new clusters demonstrated how the Alternative agrifood and Nutrition and Food Access clusters can be further parsed to arrive at new, meaningful categorizations of agrifood organizations. A key question for agrifood movement scholars has been how organizations *within* alternative agrifood movements either converge or diverge across salient and/or contentious issues (Constance et al. 2014a). This six-cluster solution helped to uncover further similarities and differences among the national agrifood organizations (see Appendix for a list of each organization in the sample categorized by the six-cluster solution).

### **Anti-Industrial Agri-Technology**

The first new cluster produced by the hierarchical cluster analysis emerged out of the original Alternative agrifood cluster in the three-cluster solution and included 56 organizations I have termed Anti-Industrial Agri-Technology organizations. As shown in Table 4-4 and Figure 4-3, 89 percent of these organizations had anti-CAFO positions, followed by 38 percent that took an anti-biotechnology stance. However, it is important

to note that while the percentage of organizations in the Anti-Industrial Agri-Technology cluster with anti-biotechnology viewpoints was higher in this cluster than in any other cluster, the raw number of organizations with this viewpoint was actually higher in the Broad-Spectrum Alternative agrifood cluster described below (also in Table 4-4). In addition, despite the high proportion of anti-CAFO organizations in the Anti-Industrial Agri-Technology cluster (89 percent), the number of organizations within this cluster with this viewpoint (50 organizations) represents only about half of all organizations in the sample with the anti-CAFO viewpoint (102 organizations), as seen in Figure 4-3. The organizations in the Anti-Industrial Agri-Technology cluster presented positions on only a few of the other agrifood issues, with a mean of 2.3 issues per organization. Moderate support for COOL (20 percent), climate change adaptation (16 percent), organic agriculture (16 percent) and fair trade (16 percent) also characterized organizations in the Anti-Industrial Agri-Technology cluster. However, these particular issues are more prevalent in another cluster, as described below. Organizations in the Anti-Industrial Agri-Technology cluster included many animal rights groups, such as People for the Ethical Treatment of Animals (PETA) and Animal Legal Defense Fund, as well as several organizations with health and environmental interests associated with anti-CAFO and anti-Biotechnology viewpoints, such as Public Citizen, Weston A. Price Foundation, and Physicians Committee for Social Responsibility.

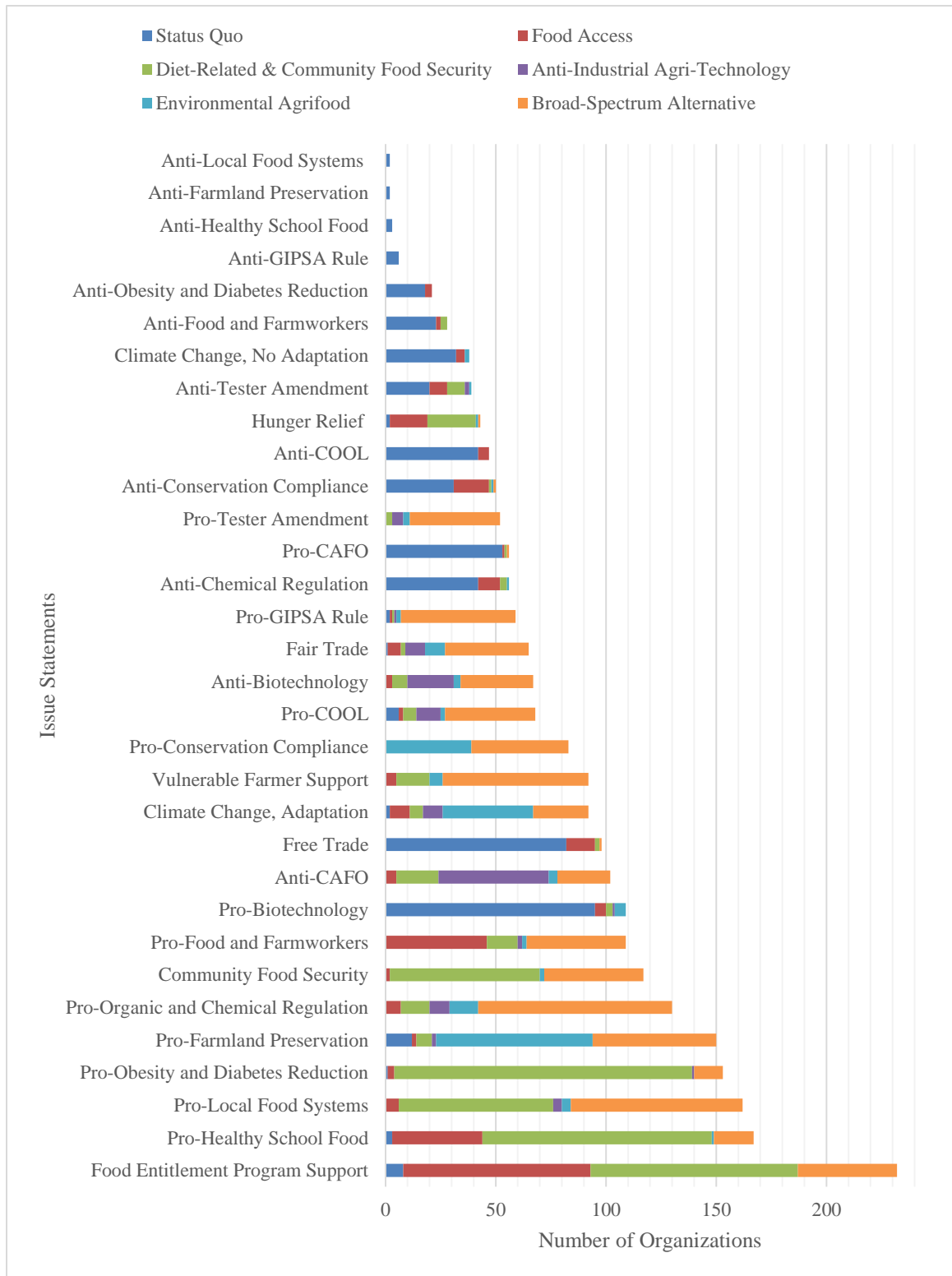
Table 4-4: Issue Statements of Nat'l Agrifood Organizations for Six-Cluster Hierarchical Solution, Frequencies and Within-Cluster Proportions, Sorted by Overall Issue Frequency

Issue Statement	Status Quo Agrifood N = 156		Food Access N = 133		Diet-Related & Community Food Security N = 148		Anti-Industrial Agri-Technology N = 56		Environmental Agrifood N = 79		Broad-Spectrum Alternative N = 118	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
<b>Mean Number of Issues/Organization</b>	<b>3.1</b>		<b>2.3</b>		<b>4.1</b>		<b>2.3</b>		<b>2.7</b>		<b>6.4</b>	
Anti-Local Food Systems	2	1%	-	-	-	-	-	-	-	-	-	-
Anti-Farmland Preservation	2	1%	-	-	-	-	-	-	-	-	-	-
Anti-Healthy School Food	3	2%	-	-	-	-	-	-	-	-	-	-
Anti-GIPSA Rule	6	4%	-	-	-	-	-	-	-	-	-	-
Anti-Obesity and Diabetes Reduction	18	12%	3	2%	-	-	-	-	-	-	-	-
Anti-Food and Farmworkers	23	15%	2	2%	3	2%	-	-	-	-	-	-
Climate Change, No Adaptation	32	21%	4	3%	-	-	-	-	2	3%	-	-
Anti-Tester Amendment	20	13%	8	6%	8	5%	2	4%	1	1%	-	-
Hunger Relief	2	1%	17	13%	22	15%	-	-	1	1%	1	1%
Anti-COOL	42	27%	5	4%	-	-	-	-	-	-	-	-
Anti-Conservation Compliance	31	20%	16	12%	1	1%	-	-	1	1%	1	1%
Pro-Tester Amendment	-	-	-	-	3	2%	5	9%	3	4%	41	35%
Anti-Chemical Regulation	42	27%	10	8%	3	2%	-	-	1	1%	-	-
Pro-CAFO	53	34%	1	1%	1	1%	-	-	-	-	1	1%
Pro-GIPSA Rule	2	1%	1	1%	1	1%	1	2%	2	3%	52	44%
Fair Trade	1	1%	6	5%	2	1%	9	16%	9	11%	38	32%
Anti-Biotechnology	-	-	3	2%	7	5%	21	38%	3	4%	33	28%

Table 4-4, continued

Issue Statement	Status Quo Agrifood N = 156		Food Access N = 133		Diet-Related & Community Food Security N = 148		Anti-Industrial Agri-Technology N = 56		Environmental Agrifood N = 79		Broad-Spectrum Alternative N = 118	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Pro-COOL	6	4%	2	2%	6	4%	11	20%	2	3%	41	35%
Pro-Conservation Compliance	-	-	-	-	-	-	-	-	39	49%	44	37%
Climate Change, Adaptation	2	1%	9	7%	6	4%	9	16%	41	52%	25	21%
Vulnerable Farmer Support	-	-	5	4%	15	10%	-	-	6	8%	66	56%
Free Trade	82	53%	13	10%	2	1%	-	-	-	-	1	1%
Anti-CAFO	-	-	5	4%	19	13%	50	89%	4	5%	24	20%
Pro-Biotechnology	95	61%	5	4%	3	2%	1	2%	5	6%	-	-
Pro-Food and Farmworkers	-	-	46	35%	14	9%	2	4%	2	3%	45	38%
Community Food Security	-	-	2	2%	68	46%	-	-	2	3%	45	38%
Pro-Organic and Chemical Regulation	-	-	7	5%	13	9%	9	16%	13	16%	88	75%
Pro-Farmland Preservation	12	8%	2	2%	7	5%	2	4%	71	90%	56	47%
Pro-Obesity and Diabetes Reduction	1	1%	3	2%	135	91%	1	2%	-	-	13	11%
Pro-Local Food Systems	-	-	6	5%	70	47%	4	7%	4	5%	78	66%
Pro-Healthy School Food	3	2%	41	31%	104	70%	-	-	1	1%	18	15%
Food Entitlement Program Support	8	5%	85	64%	94	64%	-	-	-	-	45	38%

Figure 4-3: Issue Statements of Nat'l Agrifood Organizations for Six-Cluster Hierarchical Solution, Sorted by Overall Issue Frequency





## **Environmental Agrifood**

Another new cluster in the six-cluster solution also emerged from the original Alternative agrifood cluster. Here, a cluster of 79 organizations that focused almost exclusively on issues associated with the natural environment was parsed from the remaining alternative agrifood organizations. This new Environmental agrifood cluster (mean = 2.7 issues) formed in much the same process as the Anti-Industrial Agri-Technology cluster described above. Organizations in the Environmental agrifood cluster subscribed to supportive positions on farmland preservation (90 percent), climate change adaptation (52 percent), and conservation compliance policies (49 percent) at high rates (see Table 4-4 and Figure 4-3). However, despite a high percentage of organizations within the Environmental agrifood cluster subscribing to these issues, the raw number of organizations with these viewpoints in the Environmental cluster represents less than 50 percent of the overall sample (within each issue).

As Table 4-4 shows, some Environmental agrifood organizations also had positions on other issues such as organic agriculture (16 percent) and fair trade (11 percent), but organizations supporting these same two issues appeared much more frequently in the Broad-Spectrum Alternative agrifood cluster described below. Similar to the Anti-Industrial Agri-Technology cluster, when an organization subscribed to the most common issues in the Environmental agrifood cluster (farmland preservation, climate change adaptation, and conservation compliance), but few others, they were clustered there, in the Environmental agrifood cluster. When the organization subscribed to these issues alongside a broader selection of other issues, they were categorized into a

different cluster. Examples of organizations in this cluster include many predominantly environmental movement organizations such as World Wildlife Fund, Environmental Defense Fund and the Sierra Club, alongside several government agency professional associations (e.g., National Association of Conservation Districts) and agri-environmental organizations like the Pollinator Partnership and Marine Stewardship Council.

### **Broad-Spectrum Alternative Agrifood**

The distinguishing trait of the 118 organization cluster I have termed Broad-Spectrum Alternative agrifood was its higher mean number of issues per organization (mean = 6.4 issues) relative to the Anti-Industrial Agri-Technology cluster (mean = 2.3 issues) and the Environmental Agrifood cluster (mean = 2.7 issues), which it was related to in the three-cluster solution. As shown in Table 4-4, 15 issues within the cluster had proportions above 20 percent. When comparing cluster proportions, seven of these issues were highest in the Broad-Spectrum Alternative agrifood cluster. The Broad-Spectrum Alternative agrifood cluster included relatively high proportions of many issues that were only represented in small proportions in the previously discussed Anti-Industrial Agri-Technology cluster and the Environmental agrifood cluster, such as support for GIPSA regulations (44 percent), the Tester Amendment (35 percent), and vulnerable farmer populations (56 percent). In addition, the issues prominent in the Environmental and Anti-Industrial Agri-Technology clusters were also highly represented in this new cluster, again, as a result of organizations holding these views along with a larger overall total number of issues.

Support for organic agriculture was the most common issue in the Broad-Spectrum Alternative agrifood cluster (75 percent), suggesting that organizations that vocalize support for organic agriculture also tend to emphasize more issues overall, even though organic agriculture might be considered an Environmental agrifood or Anti-Industrial Agri-Technology issue (also appearing in 16 percent of organizations in both of those clusters). Local food systems support was the second most frequent issue in the cluster (66 percent), but as shown below, this issue was also common in another cluster, as was the case for food and farmworker support (38 percent). Overall, the key trait of the Broad-Spectrum Alternative agrifood cluster is the high proportion of many issues represented in the cluster, distinguishing it from the other clusters that have more specific issue orientations across fewer total issues. Example organizations include the National Sustainable Agriculture Coalition, Cornucopia Institute, and National Farmers Union. Next, I will describe each of the two sub-clusters resulting from the original Nutrition and Food Access cluster in the three-cluster solution.

### **Diet-Related and Community Food Security**

In the six-cluster solution, the original Nutrition and Food Access cluster split to create two clusters I have labeled Diet-Related and Community Food Security (N=148) and Food Access (N=133). One key distinguishing trait of the Diet-Related and Community Food Security cluster was a higher proportion of organizations with obesity and diabetes reduction (91 percent) and healthier school food (70 percent) viewpoints (see Table 4-4). In addition, this cluster included high proportions of organizations that supported local food systems (47 percent) and community food security (46 percent).

Often set in contrast to other food access policies and models, community food security is arguably a more systems-driven, holistic approach to food access, which may explain its linkage to the diet-related health issues and local food systems in the cluster (see Gottlieb and Fisher 1996; Hamm and Bellows 2003). In addition, support for federal entitlements characterizes 64 percent of organizations in the Diet-Related and Community Food Security cluster; however the same is true of the Food Access cluster, so federal entitlement does not specifically explain the difference between the clusters, despite its high frequency in both. Similar proportions of hunger relief are also evident between the two clusters. Organizations in this cluster included the American Heart Association, Congressional Hunger Center, and National WIC Association.

### **Food Access**

The Food Access cluster is the most difficult to interpret of the six clusters. First, compared to each of the other sub-clusters in the six-cluster solution, the Food Access cluster does not have the highest proportion on *any* issue (seen in Figure 4-3). The highest frequency issue in the Food Access cluster is federal entitlement support, found among 64 percent of the organizations (Table 4-4), and although only 13 percent of organizations in the cluster subscribed to hunger relief or a food aid approach, closer examination of the raw data (not shown) indicated that the Food Access cluster contained organizations that supported these two issues either exclusively or alongside a limited number of other issues such as healthy school food (31 percent) or food and farmworker support (35 percent). As a result, I characterized this cluster as Food Access, since most organizations within it emphasized at least federal entitlement support or hunger relief,

but with limited interest in other issues. In contrast, the Diet-Related and Community Food Security cluster included organizations that supported federal entitlement and hunger relief positions only when the organizations *also* supported more total issues, including obesity and diabetes reduction and community food security. This comparison of the Food Access and Diet-Related and Community Food Security clusters is shown in the mean number of issues per organization in the respective clusters, as organizations in the former averaged only 2.3 issues compared to 4.1 issues in the latter.

Further examination also points to the interesting way that food/farmworker support issues were distributed across the clusters of agrifood organizations. As shown above in the three-cluster solution (Table 4-3 and Figure 4-2), organizations supporting food and farmworkers distributed relatively evenly into the Alternative agrifood and Nutrition and Food Access clusters (19 percent vs. 21 percent) at that level. With the six-cluster solution, on a percentage basis, this issue was most common among Broad-Spectrum Alternative agrifood organizations (38 percent), followed by the Food Access (35 percent). In cases when food and farmworker support was linked to more total issues, those issues were often those found in high proportion in the Broad-Spectrum Alternative agrifood cluster. In other cases, food and farmworker support was paired with fewer total issues as part of the Food Access cluster, supported by the low mean of that cluster (2.3 issues per organization). Unique to food and farmworker support, however, was the relatively large number of organizations (N=27) that focused on this issue *only*, totaling 25 percent of all the organizations with this position<sup>11</sup>. The clustering algorithm placed these organizations with the other food and farmworker support organizations that took

---

<sup>11</sup> This was the largest incidence of single-issue in the dataset, both by raw number and percent.

up the fewest positions, which happened to be issues common to the Food Access cluster. Organizations in this Food Access cluster included Community Action Partnership, Fellowship of Reconciliation, Global Workers Justice Alliance, Move for Hunger, and National Council of La Raza.

## **Discussion**

A key challenge for research on agrifood movements is determining the extent to which organizations within these movements converge and diverge across issues. This analysis provided several key findings systematically presenting not only which agrifood issues organizations have taken up, but also how those issues related to each other across the national agrifood organizational field. I now summarize and discuss findings from the descriptive cluster analysis by more closely examining areas of issue convergence and diversity among the organizations in the sample. As presented in Chapter Two, a social movements perspective positions issue orientation as an iteration of prognostic framing, where organizations select and take sides on issues as a way to frame “the solution” to a social problem (Benford and Snow 2000). In addition, scholars of collective action frames also present “frame alignment” processes where organizations work to improve the effectiveness of their frames (Snow et al. 1986). Drawing from these processes, I apply the concept of “frame bridging” to argue that some agrifood issues present “ideologically congruent but structurally unconnected frames regarding a particular issue or problem,” whereby agrifood organizations with different issue orientations can locate issues that bridge their interests (Snow et al. 1986: 467). These “bridge issues,” as I refer to them, are those issues that might connect organizations either in support or opposition

of the status quo agrifood system – organizations that have different but overlapping issue orientations.

### *Convergence and Divergence: Issue Orientation*

The cluster analysis procedure produced a solution with two viable solutions—a three-cluster and six-cluster result. The three-cluster solution demonstrates convergence at a broader level where organizations have three distinct types of issue orientation—Status Quo, Nutrition and Food Access, and Alternative agrifood positions. This solution fits a perspective that despite much diversity within the agrifood organizational field, organizations do converge into a small number of categories based on issue orientation. However, the field is still diverse, and at a more granular level, there is divergence of issue orientation into sub-clusters where Nutrition and Food Access and Alternative Agrifood clusters of organizations also reflect key differences in issue orientation demonstrated in the six-cluster solution. Evidence of convergence and diversity is not an either/or juxtaposition, but rather a complexity of *patterns* that suggests relative convergence at a broader level amidst greater diversity at a more specific level. In this way, both cluster solutions, together, accurately depict the national agrifood organizational field, and this analysis contributes insights into specific patterns that demonstrate both convergence and diversity.

One finding of this research is that categorizing organizations into a stark conventional versus alternative agrifood binary masks considerable variation in issue emphases. As suggested by Allen (2004), alternative agrifood movements can be understood with two distinct, but related foci—sustainable agriculture and food security.

However, the findings from the three-cluster solution point to several elements of issue diversity even within these two broad alternative categories. The analysis in this chapter showed that there are many Nutrition and Food Access organizations that cannot be easily construed as converging with other Alternative agrifood organizations that focus on a number of comparatively diverse agrifood issues. Some of the Nutrition and Food Access organizations identified in the three-cluster solution engaged with one or a very few other environmental, production, or agricultural trade issues. However, overall few enough organizations did so that a distinct Nutrition and Food Access cluster of organizations became apparent. In some cases, these organizations subscribed to more Status Quo agrifood viewpoints, such as support for chemical inputs in agriculture or free trade. In terms of issue diversity, Nutrition and Food Access organizations fell into a middle ground between the more starkly apparent differences in issue orientation of Status Quo agrifood and Alternative agrifood organizations.

However, despite divergence of Nutrition and Food Access organizations and Alternative agrifood organizations in the three-cluster solution, issues common to the Nutrition and Food Access cluster did also appear among some organizations in the Alternative agrifood cluster. For example, as shown in Table 4-3, 18 percent of organizations in the Alternative agrifood cluster supported federal food entitlement and 19 percent supported community food security, a result that stemmed from these two issues overlapping with others that clustered organizations as Alternative Agrifood as opposed to the Nutrition and Food Access. That a Nutrition and Food Access cluster stood apart from a broader Alternative agrifood cluster that nonetheless included organizations addressing prevalent issues among organizations in the Nutrition and Food



Access suggests overlap of these interest areas, but not so much that they form a clearly unified issue orientation. Evidence from the three-cluster solution indicated that issue convergence is present among some organizations with both Nutrition and Food Access and Alternative agrifood positions, but the extent to which it exists is not strong enough to merge these two issue orientations into one inclusive cluster of agrifood movement organizations. If more organizations that clustered into the Alternative agrifood group incorporated food security and nutrition goals explicitly in their issue statements, or more Nutrition and Food Access organizations subscribed to Alternative agrifood perspectives, then these two groups would more clearly cluster together. However, this was not the case for the national agrifood organizations in this study.

It is therefore too simplistic to assert that agrifood organizations are either “status quo” or “alternative,” particularly given the prevalence of national Nutrition and Food Access organizations which have presented issue orientation patterns that show elements of either, neither, or both sides of this false binary. Nonetheless, as shown in comparisons on many other agrifood issues, such as trade, production, environmental, and farm population concerns (e.g., supporting vulnerable farmers or opposing food/farmworker justice), there is a clear cleavage between organizations that fall into the Status Quo agrifood and Alternative agrifood clusters. The three-cluster solution revealed that a binary organizing of agrifood interests was overly simplified, but also that some agrifood issues did serve to bifurcate organizations in the sample. For example, when an organization had more Status Quo viewpoints on production issues, it was also prone to have Status Quo positions on environmental issues too, and vice versa, as shown by the

issues with the highest proportions in both the Status Quo and Alternative Agrifood clusters.

The six-cluster solution provided further insights on patterns of agrifood issue orientations across national organizations. The Status Quo cluster remained intact from the three-cluster to the six-cluster solution, suggesting greater alignment among these organizations' issue orientations compared to the Nutrition and Food Access and Alternative agrifood clusters. This indicates that Status Quo agrifood organizations had more cohesive issue orientations compared to organizations in the other two clusters as clustering iterations proceeded. From the Alternative agrifood cluster in the three-cluster solution, the six-cluster solution yielded three distinct Alternative agrifood groups: 1) Anti-Industrial Agri-Technology, 2) Environmental agrifood, and 3) Broad-Spectrum Alternative agrifood. However, we cannot conclude that organizations in these three differentiated Alternative agrifood clusters disagreed about many of the agrifood issues. Rather the results point to different patterns in issue selection. Some Alternative agrifood organizations were characterized by engagement with only a small number of *either* environmental *or* industrial agri-technology issues. The absence of a broader range of agrifood issues on their organizational menus made those Alternative agrifood organizations distinct from the Broad-Spectrum alternative agrifood cluster.

The separation between Food Access and Diet-Related and Community Food Security organizations that emerged in the six-cluster solution was more subtle. Both of these new clusters showed high concentrations of organizations that supported federal entitlements. However, one group added to their issue orientation diet-related health and community food security approaches; the mean number of agrifood issues selected by

organizations in the Diet-Related and Community Food Security cluster was higher (4.1 issues) than for the Food Access cluster (2.3 issues). This suggests that while national alternative agrifood movements may be addressing food access and nutrition issues, many national Nutrition and Food Access organizations have not demonstrated interest in or taken up a broader set of agrifood issues. Therefore, it may be reasonable to expect a difference in approach, goals, and activities of Nutrition and Food Access organizations that subscribed to diet-related health and community food security positions in contrast to those that more closely prioritized food access issues alone.

### *Frame Bridging Issues*

Another approach to interpreting the results is to focus not only on which issues were most common in each cluster, but to account for those issues that are split across different clusters. These issues are important for clarifying patterns of issue orientation within the national agrifood organizational field, as they may offer “frame bridges” that can bring organizations with different issue orientations into alignment in pursuit of a common goal and provide opportunities for further convergence in the field (see Snow et al. 1986). As presented in this chapter, each agrifood organizational cluster captures convergence around one set of issues, but also divergence from different issue orientation patterns found in the other organizational clusters. In this section, I present several issues that provide “bridges” between clusters that might enhance their mobilization potential, either in support or opposition of the status quo agrifood system. This research systematically demonstrated several issues with this potential.

## **Federal Entitlement Program Support**

Support for federal food entitlement programs, such as the Supplemental Nutrition Assistance Program (SNAP), Women, Infants, and Children (WIC) program, Commodity Supplemental Food Program, and others, was the issue on which the largest number of national agrifood organizations had a position (232 of 690 organizations, 34 percent), shown above in Table 4-1 and Figure 4-2). Not surprisingly, this issue was prominent in the Nutrition and Food Access cluster in the three-cluster solution and 64 percent of organizations in this cluster held this position (see Table 4-3). Other organizations that supported federal entitlements were found among Alternative agrifood organizations, particularly the Broad-Spectrum Alternative agrifood group in the six-cluster solution that included support for federal entitlements (38 percent of the cluster proportion) alongside a longer list of alternative agrifood issues (Table 4-4). Thus, the issue of federal food entitlements offered one bridging issue between the Nutrition and Food Access and Alternative agrifood clusters.

In addition, federal entitlement support was also present among eight organizations in the Status Quo cluster, though this is a small percentage (five percent). However, I argue that federal entitlements pulled organizations with Status Quo issue support into the Nutrition and Food Access cluster, demonstrated by the presence of several typically Status Quo issue positions that appeared in the Nutrition and Food Access cluster. Table 4-5 isolates the 179 organizations in the Nutrition and Food Access cluster that supported federal food entitlements. The frequencies presented show the number of those organizations that also had issue statements that were highly represented in the Status Quo cluster. Although small on a percentage basis, the table gives some

indication that federal entitlement support overlaps with several issues common in the Status Quo cluster, particularly support for free trade (8 percent) and opposition to conservation compliance (9 percent), chemical regulation (7 percent) and the Tester Amendment (7 percent).

*Table 4-5: Issue Statements of Top Ten Status Quo Issues: Frequency and Within-Cluster Proportion of Nutrition and Food Access Organizations that Support Federal Food Entitlement Programs, N=179*

Top Ten Status Quo Cluster Issue Statements*	Organizations in the Nutrition and Food Access Cluster that Support Federal Entitlements N=179	
	Frequency	Percent
Pro-Biotechnology	6	3%
Free Trade	15	8%
Pro-CAFO	1	1%
Anti-Chemical Regulation	12	7%
Anti-COOL	4	2%
Climate Change, No Adaptation	4	2%
Anti-Conservation Compliance	17	9%
Anti-Food and Farmworkers	4	2%
Anti-Tester Amendment	13	7%
Anti-Obesity and Diabetes Reduction	2	1%

\* These ten issues were the most common among organizations in the Status Quo cluster.

One explanation is that federal food entitlement support arises from multiple rationales. It can reflect a commitment to food access primarily, as in the Food Access cluster in the six-cluster solution (64 percent of organizations in this cluster). Federal food entitlement support is also compatible with an orientation to improving the healthfulness of foods available to low-income consumers as captured in the Diet-Related and Community Food Security cluster (also 64 percent) or as part of a Broad-Spectrum approach to Alternative agrifood system change (18 percent). However, federal food

entitlements also garnered support from some organizations with other typically Status Quo agrifood stance; such organizations and their constituents have likely benefitted from increased sales of foods prioritized through more robust usage of entitlements. Overall, federal entitlement support was the issue position shared by the largest number of national agrifood organizations. It could serve as an issue of common interest across varied issue orientations and on which a wide range of agrifood organizations could find agreement.

### **Community Food Security**

Community food security is in some ways the prototypical frame bridging issue in agrifood systems, because the approach was initiated with the intention of linking sustainable agriculture and local food systems to issues of food access (Hamm and Bellows 2007; Allen 2004: 45). The strong association with sustainable agriculture and local food systems, foundational concerns of alternative agrifood organizations, would make community food security likely to be an Alternative agrifood issue. Indeed that is the case for 47 organizations in this cluster (19 percent), while the remaining 70 community food security organizations were clustered as Nutrition and Food Access organizations, totaling 25 percent of this cluster (see Table 4-3). Importantly the majority of national organizations demonstrating support for community food security did not tend to be associated with a wider possible range of Alternative agrifood positions. Instead most were oriented with federal entitlement support and nutrition-related issues, such as obesity and diabetes reduction. In other words, in this study, more organizations appeared to support community food security as a food access issue rather than as both a food access and alternative agrifood issue.

This splitting of community food security support corresponds with support for community food security provisions in the Farm Bill, including a large sign-on letter that included more than 50 of the organizations in the study sample<sup>12</sup>; many of these organizations did not express any other positions common to the Alternative agrifood cluster. In fact, 16 of these organizations *also* used hunger relief approaches synonymous with emergency food provisioning (including the nation's largest emergency provider, Feeding America) even though these two approaches have been cited as contrasting, not complementary, strategies for addressing food insecurity (see Allen 1999). And despite the community food security approach's focus on market-driven procurement and community-based entrepreneurship over direct aid programs, study organizations' support for federal food entitlements often coincided with their support for community food security. This suggests that the contrast between anti-hunger interests and community food security approaches may be more conceptual than practical, at least based on the specific agrifood issues examined in this research.

### **Local Food Systems**

Local food systems support is another bridging issue, appearing in relatively high percentages in both the Alternative agrifood (34 percent) and Nutrition and Food Access (27 percent) clusters; support for local food systems was linked in this study with issues that span both of these clusters. For example, farm-to-school projects have been framed not only to address healthier food and nutrition education goals (as would align with the Nutrition and Food Access cluster) but also to promote local sourcing opportunities that

---

<sup>12</sup> "Nutrition Priorities for the 2012 Farm Bill."  
<https://www.apha.org/~media/files/pdf/advocacy/letters/2012/farmbillnutritionprioritiesfinal41912.ashx>

can improve farmer livelihoods (which would align with aspects of the Alternative agrifood organizational cluster) (Bagdonis et al. 2009; Joshi et al. 2008). More specifically, in the six-cluster solution, 47 percent of organizations in the Diet-Related and Community Food Security cluster supported local food systems, while 66 percent of the Broad-Spectrum Alternative included this viewpoint (Table 4-4). This suggests multiple valences in the local food issue, which has been framed as a link to healthy food and as a crucial part of community food security approaches (e.g., Gottlieb and Joshi (2010), but also recognized for other benefits valued across AAMs, including promotion of less chemical intensive production systems, organic agriculture, and other environmental benefits, as well as entry points for vulnerable farming populations (Obach 2015: 197-210).

### **Food and Farmworker Support**

Food and Farmworker support was another potential frame bridging issue between the Nutrition and Food Access and Alternative Agrifood clusters in the three-cluster solution, comprising 21 and 19 percent of organizations in these clusters respectively (see Table 4-3). In the six-cluster solution, this issue concentrated in the Food Access (35 percent) and Broad-Spectrum Alternative agrifood (38 percent) clusters (Table 4-4). Like the community food security and local food systems examples above, this could suggest potential for frame bridging, as food and farmworker support is part of issue orientations across clusters, both as part of a larger mix of production, environmental, and other issues common in the Broad-Spectrum Alternative agrifood cluster and among the few issues in the Food Access cluster that were most present. However, the high incidence of food and farmworker support as a single-issue (25



percent of all organizations with this viewpoint) may instead suggest that this issue is less of a bridge across clusters and more accurately an “island” which stands alone relative to other agrifood issues in the field in many instances.

## **Conclusion**

This chapter has presented cluster analyses to categorize the diverse set of 690 national agrifood organizations based on the issues and viewpoints they assert. Results showed that at a more general level, three issue orientation clusters of organizations emerged, which I have described as Status Quo agrifood, Alternative agrifood, and Nutrition and Food Access organizations. This finding challenges assertions that there exists a clear bifurcation in the national agrifood organizational field between Status Quo and Alternative agrifood organizations. Instead the Nutrition and Food Access cluster presented a mixed pattern of issue orientations that included both Status Quo and Alternative positions; as such, the nutrition and food access cluster of organizations was distinct from either a strictly status quo or an alternative pole. Further examination showed that the Status Quo cluster remained intact as organizations were clustered into smaller sub-clusters. However, the other two clusters in the three-cluster solution were less persistent. They separated into five sub-clusters which I described respectively as Anti-Industrial Agri-Technology, Environmental agrifood, Broad-Spectrum Alternative agrifood, Food Access, and Diet-Related and Community Food Security organizations. I identified issue convergence existing among those organizations that were grouped into the same cluster, and issue diversity existing across these organizational clusters. However, several specific agrifood issues presented noteworthy instances of frame bridging, as these issues were taken up by relatively high proportions of organizations

across clusters. These bridging issues present the potential for greater convergence within the national agrifood field as shared issues that link organizations across broadly different issue orientations. In Chapter Five, I further analyze both the three- and six-cluster solutions. Comparisons at both the three- and six-cluster levels will demonstrate differences in resource capacity and strategic orientation across the agrifood organizational clusters.

## **5 Cluster Comparisons of Resources and Strategy Variables: Mesomobilization Potential in the Organizational Field**

This chapter builds from the cluster solutions presented in Chapter Four to address Research Question 2: *How do differences in organizational resources and strategies correspond to the mesomobilization potential of agrifood organizations within the field?* Comparisons across a series of resource and strategy variables examine mesomobilization potential within the national agrifood organizational field. This potential refers to those organizations with shared issue orientations that could possibly align to stimulate mobilization among organizations. The cluster analyses in Chapter Four identified distinct organizational clusters each representing this mesomobilization potential across shared prognostic frames based on issue orientation. While these shared frames form the basis of mesomobilization potential, actualizing this potential is informed by shared resources and strategies (Gerhards and Rucht 1992). In this research, the organizational clusters are only potential configurations of organizations that could pursue common issues. A comparative analysis of their resources and strategies further informs our understanding of the capacity to translate this mesomobilization potential into shared action, while also identifying differences in resources and strategy that characterize a diverse field of organizations.

In this chapter, I first present descriptive statistics for eleven resource capacity variables and a set of 16 strategy variables that include measures of tactics, focal arenas, membership structure, and adherents. I then use both the three-cluster and the six-cluster solutions to conduct comparisons of organizational clusters across these resource and strategy variables. As shown in Chapter Four, the two cluster solutions offer mutually-

supportive assessments of how issue orientations correspond to the national agrifood field. The three cluster comparison provides an examination of mesomobilization potential at a broad level with each organization placed in more general categories that divide the field into Status Quo, Nutrition and Food Access, and Alternative Agrifood clusters. The six-cluster solution provides further nuance in resource and strategy comparisons across the field by placing organizations into sub-clusters with more specific issue orientations. In the discussion section of this chapter, I provide descriptive agrifood cluster profiles to summarize the comparative findings and provide descriptive detail of patterns in the diverse agricultural organizational field. I conclude by considering the implications of the findings for understanding the mesomobilization potential of national agrifood organizations.

### **Descriptive Statistics**

As described in Chapter Three, eleven variables were used to measure resource capacity of the national agrifood organizations. These included the organizational budget and several measures of revenue streams as reported by each organization in their IRS 990 tax forms. How these dollars were spent was also included in the analysis, particularly the disclosed amount of federal lobbying dollars and the summed amount of federal campaign contributions, including those to Political Action Committees (PACs). Staff was another organizational resource, so the total reported number of full-time personnel for each organization was included along with a ratio of the dollars per staff member constructed to measure how “leanly” the organization operated in terms of staff outlays. Age of the organization was another resource variable, insofar as tenure and

experience are resources that aid organizations (Walker and McCarthy 2010; Minkoff 1993). A final resource variable is a dichotomous categorical assessment if the organization receives support from or has members that are Fortune 500 companies with agrifood sector interests.

Table 5-1 shows that most resource measures for the 690 national agrifood organizations are not distributed normally, indicated by higher means than medians. For example, the largest budget in the organizational sample is over \$1.5 billion dollars, and analyzing central tendency with the mean suggests that on average, agrifood organizations have budgets of \$18.72 million. However, there are many more organizations with much smaller budgets, down to only \$1,421 (\$0.00 shown in table based on measurement is in millions). As a result, the medians presented provide a clearer indication of the distribution of data. As shown by median scores of \$0.00, over half of the national organizations receive no government contributions and spend no money on lobbying or making federal campaign donations, and exactly 60 percent of the organizations receive no financial support from Fortune 500 agrifood companies, either directly or in the form of membership.

Table 5-1: Descriptive Statistics of Resource and Strategy Variables, N=690 Agrifood Organizations

	N	Mean	Median	Min	Max	Std Dev
<b>Resource Variables</b> (dollars in millions)						
Budget	690	\$18.72	\$1.87	\$0.00	\$1,559.49	87.74
Total Contributions	690	\$12.84	\$0.62	\$0.00	\$1,510.62	77.14
Gov't Contributions	596	\$2.81	\$0.00	\$0.00	\$238.74	16.96
Non-Gov't Contributions	596	\$9.96	\$0.70	\$0.00	\$1,510.62	70.82
Program Revenue	690	\$5.31	\$0.19	\$0.00	\$625.09	31.47
Lobbying 2011-12	690	\$0.24	\$0.00	\$0.00	\$43.02	2.18
Federal Election Contributions	690	\$0.43	\$0.00	\$0.00	\$94.47	4.71
Staff Total	611	91.62	13.00	0.00	5,230	362.90
Dollars: Staff	515	\$0.49	\$0.16	\$0.00	\$5.29	0.36
Age	690	43.66	34.50	2.00	167.00	32.53
Fortune 500 Support	690	0.34				0.47
<b>Strategy Variables</b>						
Primary Agrifood Focus	690	0.57				0.49
<b>Tactics</b>						
Advocacy	690	0.81				0.39
Direct Action	690	0.12				0.32
Political Consumerism	690	0.21				0.41
Programs and Services	690	0.44				0.50
<b>Arena</b>						
Policy	690	0.83				0.37
Private Sector	690	0.16				0.37
Marketplace	690	0.44				0.50
<b>Membership Structure</b>						
Organizational Members	690	0.46				0.50
Individual Members	690	0.51				0.50
Federated/Affiliate	690	0.41				0.49
<b>Adherents</b>						
General Public	690	0.53				0.50
Private Firms	690	0.34				0.47
Science, Research, Medical	690	0.21				0.41
Government	690	0.10				0.31
School and Community-Based	690	0.29				0.45
Growers	690	0.24				0.43

Several dichotomous categorical variables measured various aspects of organizational strategy, including tactics, arena, membership structure, and adherents. The reported means for these variables indicate the proportion of organizations coded as ‘yes’ for each strategy variable (Table 5-1). Tactics are the methods organizations select in pursuit of their desired changes to the agrifood system, and I include here an important measure of whether the organization’s primary topical focus is on agrifood issues or if they only pursue agrifood positions secondarily along with other non-agrifood issues. While 57 percent of the national organizations focused primarily on agrifood issues, for 43 percent of the organizations, agrifood issues were a secondary focus. Other tactics in this research focused on categorizations often referred to as “insider” and “outsider” tactics (Taylor and Van Dyke 2004). Eighty-one percent of organizations emphasized advocacy or “insider” tactics, by far the most common tactic in the sample. This high rate of advocacy among national-level agrifood organizations matches other organizational populations (see Minkoff 1993). Direct action or “outsider” tactics were uncommon among the national agrifood organizations (12 percent), possibly reflecting an overall decline in radical protest behavior across social movements as a whole (Della Porta and Diani 2006: 191). Promoting political consumerism, arguably a growing trend in alternative agrifood movements (Long and Murray 2014), was found among 21 percent of the organizations in the sample. In addition, 44 percent of the organizations offered some version of programs and services, in some cases as a specific benefit to members, and it is not uncommon for national organizations to use both institutional advocacy and service provision tactics (Minkoff 1993).

Three ‘arena’ variables indicated the specific channels or targets selected by organizations in pursuit of their goals. Corresponding to the high level of political advocacy tactics was an emphasis on the policy arena (83 percent of organizations), while directly targeting private sector companies was much less common (16 percent), comparable to historical figures on corporate targeting from 1960-1990 (Walker et al. 2008). Forty-four percent of organizations selected the marketplace arena for pursuing their goals suggesting that almost half of the organizations in the sample seek to build the marketplace for specific products or industries as part of their strategy.

It is not uncommon for national organizations to utilize a membership structure as a strategy to either generate revenue or encourage action among constituents. In this data, 46 percent of the organizations had organizational members of some sort, typically other non-profit associations or business memberships, and just over half engaged with individual members who could join the organization’s work, typically by means of a cash donation. In addition, federated, affiliate, or chapter organizational structures decentralized activities into sub-national units at the regional, state, and local levels, and 41 percent of the organizations exhibited this membership structure.

An organization’s adherents were related to, but more specific than membership structure, and while all members were considered adherents, the adherents measures also captured other types of stakeholders and populations that the organization sought to engage and represent, including non-members. As the data show, the most common adherents were citizens and individuals from the general public (53 percent of organizations), who are called upon in pursuit of organizational goals such as campaigns and letter-writing endeavors. Other organizations pursued ties to other organizations in



their work, either in conjunction with having public adherents or exclusively. Thirty-four percent of organizations had private firms as adherents, while 29 percent had school and community-based non-profits as adherents. Close to a quarter of the organizations (24 percent) specifically represented or directly engaged farm producer populations, some via trade associations and others through producer-based, less formal arrangements.

### **Resource Capacity Comparisons Across Three Agrifood Clusters**

This research investigates how differences in resource capacity and strategic orientation vary across organizational clusters as an indication of the potential for organizations within these clusters to mobilize at the meso-level. The next analysis compares the three Status Quo agrifood, Nutrition and Food Access, and Alternative agrifood organization clusters across the resource variables described above. Kruskal-Wallis H tests were conducted for most of the quantitative resource variables, since this non-parametric statistical test adjusts for skewness, unlike tests that require normal data like ANOVA. As a result, the Kruskal-Wallis H test applies medians as the best measure of central tendency for these comparisons, and these are reported in Table 5-2. Two exceptions to the use of the Kruskal-Wallis H test are age and Fortune 500 support. Since age is normally distributed, it was evaluated with Welch's ANOVA test and the *F*-value is reported, and Fortune 500 support was tested via Pearson's chi-square as a categorical comparison. For each significant variable, pairwise comparisons showed which cluster categories were the source of difference, reported in Table 5-3.

In general, the main differences in resource capacity were found between Status Quo agrifood organizations and either one or both of the Nutrition and Food Access and

Alternative agrifood organizational clusters (Tables 5-2, 5-3). Although operating budgets did not significantly differ across the three clusters, types of income contributions and expenditures showed key distinctions. Status quo organizations were significantly less reliant on grant and donation contributions both in total and from either governmental or non-governmental sources than organizations in either the Nutrition and Food Access or Alternative agrifood organizational clusters. Instead, Status Quo organizations received significantly more income via program revenue, which can include membership dues and fees for service. Compared to both other groups, Status Quo agrifood organizations also spent significantly more dollars lobbying and contributing to federal elections. Status quo agrifood organizations also operated with significantly fewer staff members than organizations in the other two clusters, including on a per dollar basis as measured by the dollars per staff ratio. They were also significantly older than agrifood organizations in the other two groups. Finally, 68 percent of Status Quo agrifood organizations received some support from Fortune 500 companies with agrifood in their portfolios, either grants, sponsorship, or via membership dues, significantly more than both Nutrition and Food Access and Alternative agrifood organizations.

Table 5-2: Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Three Cluster Solution

Resource Variable	Agrifood Cluster (N)	Median (\$ in millions)	Chi-Sq
<b>Budget</b>	Status Quo (154)	\$2.19	4.184
	Nutrition and Food Access (283)	\$2.03	
	Alternative Agrifood (253)	\$1.43	
<b>Total Contributions</b>	Status Quo (156)	\$0.11	43.676***
	Nutrition and Food Access (281)	\$1.07	
	Alternative Agrifood (253)	\$0.81	
<b>Gov't Contributions <sup>a</sup></b>	Status Quo (143)	\$0.00 (\$0.60)	20.090***
	Nutrition and Food Access (243)	\$0.00 (\$2.29)	
	Alternative Agrifood (210)	\$0.00 (\$4.90)	
<b>Non-Gov't Contributions</b>	Status Quo (143)	\$0.00	91.967***
	Nutrition and Food Access (243)	\$0.95	
	Alternative Agrifood (210)	\$1.10	
<b>Program Revenue</b>	Status Quo (156)	\$1.02	56.355***
	Nutrition and Food Access (281)	\$0.15	
	Alternative Agrifood (253)	\$0.05	
<b>Lobbying 2011-12 <sup>a</sup></b>	Status Quo (156)	\$0.01 (\$0.92)	24.520***
	Nutrition and Food Access (281)	\$0.00 (\$0.39)	
	Alternative Agrifood (253)	\$0.00 (\$0.18)	
<b>Federal Election Contributions <sup>a</sup></b>	Status Quo (156)	\$0.00 (\$0.39)	20.166***
	Nutrition and Food Access (281)	\$0.00 (\$0.84)	
	Alternative Agrifood (253)	\$0.00 (\$0.15)	
<b>Staff Total</b>	Status Quo (147)	6.00	24.461***
	Nutrition and Food Access (244)	16.50	
	Alternative Agrifood (220)	14.00	
<b>Dollars: Staff</b>	Status Quo (106)	\$0.25	55.776***
	Nutrition and Food Access (214)	\$0.15	
	Alternative Agrifood (195)	\$0.13	

Table 5-3, continued

<b>Age<sup>b</sup></b>	Status Quo (156)	58.00	27.991***
	Nutrition and Food Access (281)	32.00	
	Alternative Agrifood (253)	30.00	
<b>Fortune 500 Support<sup>c</sup></b>	Status Quo (156)	0.68	112.330***
	Nutrition and Food Access (281)	0.31	
	Alternative Agrifood (253)	0.17	

\* *p*-value < .05; \*\* *p*-value < .01; \*\*\* *p*-value < .001

<sup>a</sup> Since a majority of the median values for these measures were \$0.00, means are shown in addition; however, the Kruskal Wallis *H* test was still applied and uses the median values as central tendency.

<sup>b</sup> Age is normally distributed in the data, so the reported values here are from the Welch ANOVA test, as Levene's test for homogeneity of variances was rejected. Therefore, the *F*-value is reported here, not Chi-square, and the pairwise comparison results from the Games-Howell post-hoc test for unequal variances.

<sup>c</sup> Variable is binary so the test is conducted with Pearson Chi-Square, not Kruskal-Wallis *H* Test. As a result, reported values are a proportion, not the median.

Table 5-4: Significant Pairwise Comparisons for Kruskal-Wallis *H* Test Results of Issue Orientation Clusters on Resource Variables, Three Cluster Solution

Resource Variable	Significant Pairwise Comparisons <sup>a</sup>
<b>Age</b>	Status Quo agrifood older than both other groups***
<b>Budget</b>	N/A
<b>Total Contributions</b>	Status Quo agrifood lower total contributions than both other groups***
<b>Gov't Contributions</b>	Status Quo lower gov't contributions than both other groups***
<b>Non-Gov't Contributions</b>	Status Quo lower non-gov't contributions than both other groups***
<b>Program Revenue</b>	Status Quo more program revenue than both other groups*** and Nutrition and Food Access more than Alternative agrifood*
<b>Staff Total</b>	Status Quo fewer staff than both other groups***
<b>Dollars: Staff</b>	Status Quo higher dollars: staff ratio than both other groups***
<b>Lobbying 2011-12</b>	Status Quo more lobbying outlays than both other groups***
<b>Federal Election Contributions</b>	Status Quo more election contributions than both other groups***
<b>Fortune 500 Support</b>	Status Quo higher proportion of support from Fortune 500 agrifood companies*** and Alternative Agrifood lower***, compared to other clusters

\* *p*-value < .05; \*\* *p*-value < .01; \*\*\* *p*-value < .001

<sup>a</sup> Pairwise comparisons conducted with Kruskal-Wallis *H* test and adjusted using Bonferroni correction (Holm 1979).

The analysis of resource variables showed few significant pairwise differences between Nutrition and Food Access and Alternative agrifood organizations (see Table 5-3). One exception was program revenue, as Nutrition and Food Access organizations received a significantly higher proportion of their funding through this channel. In addition, while Status Quo agrifood organizations were significantly more likely to receive support from Fortune 500 agrifood companies, the chi-square comparison showed that Alternative agrifood organizations also had a lower proportion of this type of support. Clearly, it was not the case that Alternative agrifood organizations never received support from large companies, as 17 percent of these organizations did, but the proportion was still significantly less than agrifood organizations in the other two clusters.

### **Resource Capacity Comparisons Across Six Agrifood Clusters**

As shown in Chapter Four, the six cluster solution for national level agrifood organizations demonstrated how Nutrition and Food Access and Alternative Agrifood clusters could be further parsed to reveal more granular patterns of issue orientation among national agrifood organizations. The Status Quo cluster, on the other hand, demonstrated a durable cohesion, not splitting into any sub-clusters at the six-cluster level. Similar to the three-cluster analysis of resources above, differences in resource capacity across these six clusters suggest the unevenness of mesomobilization potential.

As shown in Table 5-4 and Table 5-5, Status Quo agrifood organizations were significantly different from some or all of the other clusters in each of the resource capacity analyses. These findings broadly matched the three-cluster solution, not

surprising since the Status Quo agrifood cluster remained unchanged between the three-cluster and six-cluster solutions. As a result, this section prioritizes noteworthy differences across the five remaining clusters, highlighted by the relatively limited resources of the Broad-Spectrum Alternative agrifood cluster and the higher resource levels of Environmental agrifood cluster.

With a median of \$3.62 million, organizations in the Environmental cluster had higher budgets than each other cluster, and this finding was statistically significant compared to the Food Access, Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood clusters (Table 5-5). Broad-spectrum Alternative agrifood organizations, on the other hand, had the lowest budget of the five clusters (median=\$670,000), significantly less than not only the Environmental agrifood organizations but also the diet-related and food security and Food Access clusters. Environmental agrifood organizations not only had higher budgets but also received significantly higher contributions from government sources relative to organizations in the other five clusters. In addition, Environmental agrifood organizations also had significantly higher revenues through programs compared to both the Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood clusters, suggesting that Environmental organizations have developed multiple revenue streams successfully relative to the other clusters, accumulating funds from both government and programmatic sources. Food Access organizations also benefitted from significantly higher program revenues than both Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood groups. As in the three-cluster solution, Status Quo organizations in the six-cluster solution not only

received fewer contributions but also had higher program revenues than each cluster, though not significantly so compared to the Environmental agrifood cluster.

*Table 5-5: Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Six Cluster Solution*

<b>Resource Variable</b>	<b>Agrifood Cluster (N)</b>	<b>Median (\$ in millions)</b>	<b>Chi-Sq</b>
<b>Budget</b>	Status Quo (156)	\$2.19	41.083***
	Diet-Related and Community Food Security (148)	\$2.33	
	Food Access (133)	\$1.87	
	Anti-Industrial Agri-Technology (56)	\$1.29	
	Environmental (79)	\$3.62	
	Broad-Spectrum Alternative (118)	\$0.67	
<b>Total Contributions</b>	Status Quo (156)	\$0.11	54.116***
	Diet-Related and Community Food Security (148)	\$1.17	
	Food Access (133)	\$0.72	
	Anti-Industrial Agri-Technology (56)	\$0.80	
	Environmental (79)	\$1.56	
	Broad-Spectrum Alternative (118)	\$0.52	
<b>Gov't Contributions<sup>a</sup></b>	Status Quo (143)	\$0.00 (\$0.60)	51.177***
	Diet-Related and Community Food Security (127)	\$0.00 (\$3.70)	
	Food Access (116)	\$0.00 (\$0.73)	
	Anti-Industrial Agri-Technology (45)	\$0.00 (\$0.23)	
	Environmental (73)	\$0.22 (\$9.51)	
	Broad-Spectrum Alternative (92)	\$0.00 (\$3.53)	
	<b>Non-Gov't Contributions</b>	Status Quo (143)	
Diet-Related and Community Food Security (127)	\$1.40		
Food Access (116)	\$0.83		
Anti-Industrial Agri-Technology (45)	\$0.99		
Environmental (73)	\$1.40		
Broad-Spectrum Alternative (92)	\$1.09		
<b>Program Revenue</b>	Status Quo (156)	\$1.02	80.627***
	Diet-Related and Community Food Security (148)	\$0.10	
	Food Access (133)	\$0.19	
	Anti-Industrial Agri-Technology (56)	\$0.00	
	Environmental (79)	\$0.73	
	Broad-Spectrum Alternative (118)	\$0.03	

Table 5-6, continued

Resource Variable	Agrifood Cluster (N)	Median (\$ in millions)	Chi-Sq
<b>Lobbying 2011-12<sup>a</sup></b>	Status Quo (156)	\$0.01 (\$0.92)	43.188***
	Diet-Related and Community Food Security (148)	\$0.00 (\$0.50)	
	Food Access (133)	\$0.00 (\$0.27)	
	Anti-Industrial Agri-Technology (56)	\$0.00 (\$0.05)	
	Environmental (79)	\$0.00 (\$0.34)	
	Broad-Spectrum Alternative (118)	\$0.00 (\$0.14)	
	<b>Federal Election Contributions<sup>a</sup></b>	Status Quo (156)	
Diet-Related and Community Food Security (148)		\$0.00 (\$0.61)	
Food Access (133)		\$0.00 (\$1.09)	
Anti-Industrial Agri-Technology (56)		\$0.00 (\$0.05)	
Environmental (79)		\$0.00 (\$0.37)	
Broad-Spectrum Alternative (118)		\$0.00 (\$0.04)	



Table 5-7, continued

Resource Variable	Agrifood Cluster (N)	Median (\$ in millions)	Chi-Sq
<b>Staff Total</b>	Status Quo (147)	6.00	36.069***
	Diet-Related and Community Food Security (128)	18.50	
	Food Access (116)	16.00	
	Anti-Industrial Agri-Technology (48)	12.00	
	Environmental (75)	26.00	
	Broad-Spectrum Alternative (97)	10.00	
<b>Dollars: Staff</b>	Status Quo (106)	\$0.25	77.462***
	Diet-Related and Community Food Security (111)	\$0.17	
	Food Access (103)	\$0.13	
	Anti-Industrial Agri-Technology (46)	\$0.11	
	Environmental (67)	\$0.18	
	Broad-Spectrum Alternative (82)	\$0.10	
<b>Age<sup>b</sup></b>	Status Quo (156)	58.00	21.724***
	Diet-Related and Community Food Security (148)	29.50	
	Food Access (133)	35.00	
	Anti-Industrial Agri-Technology (56)	30.50	
	Environmental (79)	44.00	
	Broad-Spectrum Alternative (118)	23.00	
<b>Fortune 500 Support<sup>c</sup></b>	Status Quo (156)	0.68	130.604***
	Diet-Related and Community Food Security (148)	0.37	
	Food Access (133)	0.23	
	Anti-Industrial Agri-Technology (56)	0.11	
	Environmental (79)	0.33	
	Broad-Spectrum Alternative (118)	0.10	

\*  $p$ -value < .05; \*\*  $p$ -value < .01; \*\*\*  $p$ -value < .001

<sup>a</sup> Since a majority of the median values for these measures were \$0.00, means are shown in parentheses; however, the Kruskal Wallis  $H$  test which uses the median values as central tendency was still applied.

<sup>b</sup> Age is normally distributed in the data, so the reported values here are from the Welch ANOVA test, as Levene's test for homogeneity of variances was rejected. Therefore, the  $F$ -value is reported here, not Chi-square, and the pairwise comparison results from the Games-Howell post-hoc test for unequal variances.

<sup>c</sup> Variable is binary so the test is conducted with Pearson Chi-Square, not Kruskal-Wallis  $H$  Test. As a result, reported values are a proportion, not the median.

Table 5-8: Significant Pairwise Comparisons for Kruskal-Wallis H Test Results of Issue Orientation Clusters on Resource Variables, Six Cluster Solution

Resource Variable	Significant Pairwise Comparisons <sup>a</sup>
<b>Age</b>	Status Quo older than all other groups*** except Environmental. Environmental older than Diet-Related and Community Food Security*, Anti-Industrial Agri-Technology* and Broad-Spectrum Alternative***. Broad-Spectrum Alternative younger than Diet-Related and Community Food Security* and Food Access**.
<b>Budget</b>	Environmental higher budget than Food Access**, Anti-Industrial Agri-Technology*** and Broad-Spectrum Alternative***. Broad-Spectrum Alternative also lower than Status Quo***, Diet-Related and Community Food Security* and Food Access**.
<b>Total Contributions</b>	Status Quo less total contributions than all other clusters*** (Anti-Industrial Agri-Technology**).
<b>Gov't Contributions</b>	Status Quo less gov't contributions than Diet-Related and Community Food Security**, Food Access*, Environmental*** and Broad-Spectrum Alternative*. Environmental more than Diet-Related and Community Food Security*, Food Access**, Anti-Industrial Agri-Technology*** and Broad-Spectrum Alternative*. Diet-Related and Community Food Security higher than Anti-Industrial Agri-Technology*.
<b>Non-Gov't Contributions</b>	Status Quo less total contributions than all other clusters***.
<b>Program Revenue</b>	Status Quo more program revenue than all other groups*** except Environmental. Anti-Industrial Agri-Technology less than Diet-Related and Community Food Security*, Food Access** and Environmental***. Broad-Spectrum Alternative also less than Food Access** and Environmental***.
<b>Staff Total</b>	Status Quo significantly fewer staff than Diet-Related and Community Food Security***, Food Access*, and Environmental***. Broad-Spectrum Alternative less than Environmental*.
<b>Dollars: Staff</b>	Status Quo more dollars: staff than all others*** (Diet-Related and Community Food Security**). Broad-Spectrum Alternative less dollars: staff than Diet-Related and Community Food Security*** and Environmental***.
<b>Lobbying 2011-12</b>	Status Quo spend more on lobbying than Diet-Related and Community Food Security**, Anti-Industrial Agri-Technology*** and Broad-Spectrum Alternative***. Environmental spend more on lobbying than Anti-Industrial Agri-Technology* and Broad-Spectrum Alternative***. Food Access spend more than Broad-Spectrum Alternative*.
<b>Federal Election Contributions</b>	Status Quo spend more on election contributions than Diet-Related and Community Food Security*** and Broad-Spectrum Alternative***. Environmental spend more on election contributions than Broad-Spectrum Alternative*.
<b>Fortune 500 Support</b>	Status Quo more likely to receive Fortune 500 support*** and Anti-Industrial Agri-Technology***, Food Access* and Broad-Spectrum Alternative*** all less likely.

\* p-value < .05; \*\* p-value < .01; \*\*\* p-value < .001

<sup>a</sup> Pairwise comparisons conducted with Kruskal-Wallis H test with Bonferroni correction for significance (Holm 1979).

Analysis of lobbying and federal election donations showed that Environmental agrifood organizations invested significantly more resources in these ways than Broad-Spectrum Alternative agrifood organizations. In addition, Environmental agrifood organizations spent significantly more on lobbying than Anti-Industrial Agri-Technology organizations, and Food Access organizations spend more on lobbying than Broad-Spectrum Alternative agrifood ones also. One explanation related to Environmental agrifood organizations is that the lobbying included in this research was not limited to agrifood issues, so it is likely that these organizations, working on varied environmental issues, identified more issues on which to lobby relative to other clusters which were comprised of higher proportions of primarily agrifood focused organizations. Status quo organizations spent the most on lobbying and federal election contributions, but these findings were only significant on both measures compared to the Diet-related and Community Food Security and Broad-Spectrum Alternative Agrifood clusters.

In terms of age, organizations in the Environmental agrifood cluster were significantly older than organizations in all other clusters, except for those in the Status Quo agrifood cluster. One possible explanation for this finding is the high proportion of secondary agrifood issue organizations that populate the Environmental agrifood group (66 percent, see below). This Environmental cluster includes many organizations that focus on an array of environmental issues, some of which include agrifood topics. The environmental movement may serve as a precursor to agrifood movements with longer tenured organizations founded in the 1960s when the environmental movement rose to prominence (see Rootes 2004; Johnson 2008). In addition, the Broad-Spectrum Alternative agrifood movement organizations were significantly younger than

organizations in both the diet-related and food security and Food Access clusters, suggesting that attention to multiple, interconnecting agrifood issues may be a comparatively new organizational trend, or more simply, that older organizations have a tendency to focus on fewer overall issues in the agrifood sphere.

The three-cluster solution showed that Alternative agrifood organizations were more statistically less likely to receive support from Fortune 500 agrifood companies, and this finding was further clarified in the six-cluster solution as both Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood organizations (but not the Environmental agrifood) in the six-cluster were significantly less likely to receive this support. Because organizations in both the Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood clusters have oppositional positions on several industrial and conventional agricultural technologies and practices, and these very technologies and practices are of interest to many Fortune 500 agrifood companies, this finding fits expectations, supported by the significantly higher proportion of Fortune 500 support among the Status Quo agrifood cluster (68 percent).

### **Organizational Strategy Comparisons Across Three Agrifood Clusters**

Beyond the differences in resources across the clusters, there were also different patterns of organizational strategy across the Status Quo agrifood, Nutrition and Food Access, and Alternative agrifood organizations. I applied a Pearson's chi-square test, including pairwise comparisons to show the specific source of variation, since Pearson's chi-square is an omnibus test. These test variables included the several measures of organizational tactics, focal arenas, membership structures, and adherents selected by

sample organizations. First, a measure of whether organizations were primarily focused on agrifood topics is discussed.

*Table 5-9: Proportions and Chi-Square Comparisons for Strategy Variables, Three Cluster Solution<sup>a</sup>*

Strategy Variables	Status Quo	Nutrition and Food Access	Alternative Agrifood	Total
	(N=156)	(N=281)	(N=253)	(N=690)
Primary Agrifood	0.85***	0.46***	0.53	0.57
<b>Tactics</b>				
Advocacy	.88*	0.80	0.77	0.81
Direct Action	0.01***	0.13	0.18***	0.12
Political Consumerism	0.03***	0.14***	0.39***	0.21
Programs and Services	0.27***	0.53***	0.44	0.44
<b>Arena</b>				
Policy	0.92*	0.83	0.79	0.83
Private Sector	0.01***	0.11**	0.31***	0.16
Marketplace	0.72***	0.26***	0.47	0.44
<b>Membership Structure</b>				
Organizational Members	0.80***	0.37***	0.36***	0.46
Individual Members	0.40*	0.46	0.63***	0.51
Federated/Affiliate	0.34	0.45	0.41	0.41
<b>Adherents</b>				
General Public	0.07***	0.62***	0.71***	0.53
Private Firms	0.83***	0.18***	0.21***	0.34
Science, Research, Medical	0.17	0.27**	0.17	0.21
Government	0.06	0.09	0.14*	0.1
School and Community-Based	0.01***	0.42***	0.31	0.29
Growers	0.35***	0.11***	0.31**	0.24

\* *p*-value < .05; \*\* *p*-value < .01; \*\*\* *p*-value < .001

<sup>a</sup> Pairwise comparisons for significance based on *p*-values calculated from adjusted *z*-scores with Bonferroni adjustment (Holm 1979).

As shown in Table 5-6, 57 percent of the organizations in the study were primary agrifood organizations. The Status Quo agrifood cluster had a significantly higher

proportion (86 percent) of primary agrifood focus organizations. On the other hand, less than half (46 percent) of the Nutrition and Food Access organizations were comprised of primary agrifood focus organizations, significantly lower than the expected proportion according to the chi-square analysis. This result suggests that among Nutrition and Food Access and Alternative agrifood organizations, agrifood issues are often incorporated into an issue focus that includes other non-agrifood issues.

### *Tactics*

Tactics are the methods organizations select in pursuit of their desired changes to the agrifood system. Eighty-one percent of all agrifood organizations, regardless of cluster, engaged in advocacy efforts, suggesting that at least at the national-level, agrifood organizations are quite likely to emphasize political advocacy relative to other tactics for agrifood change. Eighty-eight percent of Status Quo agrifood organizations used this approach, a significantly higher proportion relative to the other two clusters. This coincided with the significantly lower likelihood of Status Quo organizations to use direct action or political consumerism approaches to change. However, 27 percent of Status Quo organizations engaged in some type of service provision, in many cases aimed at aiding members of their organizations via technical assistance and consultation, although this proportion was still significantly less than organizations in the other two clusters.

A significantly higher proportion of Alternative agrifood organizations utilized direct action approaches relative to the two other groups, but this was still true of only 18 percent of Alternative agrifood organizations. Insofar as direct action is a hallmark of

social movement activity, these data showed limited evidence of these tactics. However, organizations including direct action tactics were disproportionately found in the Alternative agrifood cluster relative to the other two. In addition, Alternative agrifood organizations were more likely to apply a political consumerism approach (39 percent) than organizations in the other two clusters. In combination, these findings suggest that organizations in the Alternative agrifood cluster sought change through channels other than political advocacy more readily than their counterparts, including Nutrition and Food Access organizations. Although issues strongly present among organizations in the Nutrition and Food Access cluster such as obesity and diabetes prevention and support healthier school food relate to food consumption, tactically national-level Nutrition and Food Access organizations were significantly more likely to pursue programs and services (53 percent) as opposed to agrifood systems change as a way to address these issues.

### *Arena*

The arena an organization selects to work within is directly related to the tactics they employ. This was most clear with respect to advocacy change tactics and the policy arena, as the proportions for both variables were very similar across all three clusters (Table 5-4). It is logical to conclude that organizations that emphasize political advocacy will typically direct their advocacy efforts at policymakers and the state more generally. Two other arenas were examined. Sixteen percent of organizations indicated that they sought to influence private firms, typically specific large companies, with their campaign and change efforts, including both advocacy and direct action tactics, which includes

boycotts. Making private firms the targets for action was significantly more likely among Alternative agrifood organizations (31 percent compared to 11 percent for Nutrition and Food Access and 1 percent for Status Quo). A third arena refers to the more abstract “marketplace,” referring to a more general approach of building or changing the industry or consumer marketplace in some way, most often in the form of selling or buying more of a certain type of product or increasing the financial well-being of firms within a particular sector. The marketplace variable overlaps in some respects with the political consumerism variable, but marketplace arena includes business and economic development efforts that exceed a more singular political consumerism tactic. For example, although Status Quo organizations rarely applied a political consumerism tactic, they were significantly more likely than organizations in the other two clusters to see the marketplace as an arena for pursuing agrifood change goals. Speculatively, this is a likely indicator of trade associations within the Status Quo cluster that seek to develop and expand specific markets of interest to their members.

### *Membership Structure*

Analysis of membership patterns illuminates the different forms agrifood organizations can take to develop a pool of constituents, suggesting a strategic consideration to inform mobilization. Eighty percent of Status Quo agrifood organizations have organizational members, compared to only 36 and 37 percent in the other two clusters (Table 5-4), suggesting Status Quo agrifood organizations are strongly characterized by their representation of the interests of private firms and other associations. Alternative agrifood organizations are significantly more likely and Status



Quo agrifood organizations significantly less likely to have individual member structures. In addition, 41 percent of all organizations employed a federated structure, which includes regional, state, or local branches, affiliates, and chapters, effectively decentralizing the efforts of the organization. However, no significant differences in this organizational form were found across the three clusters.

### *Adherents*

Adherents refers to the populations each organization engages in pursuit of their goals. These are often members—either individuals from the general public or organizations (see below)—but can include other more specific sectors and populations such as specific local or state government entities; scientists, researchers, and the medical community; community organizations and schools; or agricultural producers. Organizations in both the Nutrition and Food Access and Alternative Agrifood clusters were more likely to encourage action from the general public than Status Quo agrifood organizations (Table 5-4), getting with the latter’s emphasis on organizational membership described above. Nutrition and Food Access and Alternative Agrifood organizations not only encouraged individuals to join their organizations (if they were membership organizations) but also sought donations and volunteerism from the public. Status Quo organizations, on the other hand, were significantly more likely to represent private firms and growers, again, speculatively indicative of an agricultural trade association model that seeks to represent the interests of specific, often commercial agrifood sectors. Significantly less likely to have private firms as adherents, both Nutrition and Food Access and Alternative Agrifood organizations engaged with other

types of adherents. For Nutrition and Food Access organizations, this included science, research, and medical adherents, as well as schools and community-based organizations, which was not surprising since the issues this cluster prioritizes include healthier food and improved access for children and communities through both federal entitlements and community food security approaches. Alternative agrifood organizations, like Status Quo organizations, were more apt to have grower adherents, suggesting that both clusters maintained some emphasis on the production and business needs of individual producers. Alternative agrifood organizations also had significantly more adherents from the government sector including natural resource departments, local governments, and environmental regulators, suggesting a strategic focus on engaging this population on issues common to the Alternative Agrifood cluster, such as support for farmland preservation, organic agriculture, and local food systems.

### **Organizational Strategy Across Six Agrifood Clusters**

The broad patterns of organizational strategy at the three-cluster level of national agrifood organizations can be shown in sharper relief through comparisons at the six-cluster level. The assumption guiding these comparisons is that while the agrifood field forms three general clusters based on issue orientation, the six-cluster solution points to greater nuance in issue orientation among the Nutrition and Food Access and Alternative Agrifood clusters that separate into more specific sub-clusters, likely suggesting key strategic differences that influence the mobilization potential of organizations in each sub-cluster.

Table 5-10: Proportions and Chi-Square Comparisons for Strategy Variables, Six Cluster Solution<sup>a</sup>

Strategy Variables	Status Quo	Diet-Related and Comm. Food Security	Food Access	Anti-Industrial Agri-Tech.	Environmental	Broad-Spectrum Alternative	Total
	(N=156)	(N=148)	(N=133)	(N=56)	(N=79)	(N=118)	(N=690)
Primary Agrifood	0.85***	0.49	0.43***	0.45	0.34***	0.69*	0.57
<b>Tactics</b>							
Advocacy	0.88	0.77	0.84	0.79	0.86	0.69*	0.81
Direct Action	0.01***	0.08	0.18	0.36***	0.08	0.16	0.12
Political Consumerism	0.03***	0.20	0.08***	0.70***	0.23	0.36***	0.21
Programs and Services	0.27***	0.56**	0.49	0.41	0.42	0.47	0.44
<b>Arena</b>							
Policy	0.92*	0.79	0.87	0.75	0.89	0.75*	0.83
Private Sector	0.01***	0.07*	0.14	0.61***	0.18	0.25*	0.16
Marketplace	0.72***	0.23***	0.29***	0.71***	0.30	0.47	0.44
<b>Membership Structure</b>							
Organizational Members	0.80***	0.31***	0.43	0.20***	0.33	0.46	0.46
Individual Members	0.40*	0.50	0.42	0.66	0.73***	0.54	0.51
Federated/Affiliate	0.34	0.47	0.43	0.29	0.59**	0.35	0.41
<b>Adherents</b>							
General Public	0.07***	0.63*	0.60	0.96***	0.59	0.67**	0.53
Private Firms	0.83***	0.11***	0.26	0.18*	0.25	0.20**	0.34
Science, Research, Medical	0.17	0.41***	0.13*	0.07*	0.27	0.16	0.21
Government	0.06	0.12	0.06	0.02	0.23**	0.14	0.10
School and Community-Based	0.01***	0.41**	0.44***	0.16	0.27	0.42**	0.29
Growers	0.35**	0.05***	0.18	0.14	0.19	0.47***	0.24

\* p-value < .05; \*\* p-value < .01; \*\*\* p-value < .001

<sup>a</sup> Pairwise comparisons for significance based on p-values calculated from adjusted z-scores with Bonferroni adjustment (Holm 1979).

As noted in the three-cluster strategy section above, the proportion of organizations that focus primarily on agrifood issues is a potentially important measure. Specifically, the Status Quo and Broad-Spectrum Alternative agrifood clusters had a significantly higher proportion of primary agrifood organizations relative to the other four groups (Table 5-7), and the environmental and Food Access clusters had a significantly lower proportion. As expected, the Status Quo and Broad-Spectrum Alternative agrifood organizations, both of which tended to focus on more total issues across the agrifood issue spectrum, were more likely to be primarily oriented to agrifood topics (69 and 85 percent respectively). Across the other four clusters, less than half of the organizations were primarily focused on agrifood topics, demonstrating that in these clusters many organizations have added agrifood topics to broader issue orientations outside the agrifood arena. This finding is particularly noteworthy with (34 percent) and Food Access organizations (43 percent), likely an indicator that environmental movement and anti-poverty organizations selectively identified agrifood issues that overlapped with their primary foci on other issues.

### *Tactics*

There were significant differences across the six clusters in each of the other four tactics measures. Although all national level agrifood organizations demonstrated a high tendency to focus on advocacy change (81 percent), Broad-Spectrum Alternative agrifood organizations were significantly less likely to do so (69 percent). Broad-spectrum agrifood organizations also exhibited the strongest attention to political consumerism approaches (36 percent). Status Quo organizations were significantly less

likely to tactically orient to programs and services (27 percent), and the diet-related and food security cluster was more likely (56 percent). Overall, 44 percent of the organizations in the study provided some form of programs and services, so in combination, the conclusion is that national agrifood organizations were most involved in political advocacy and next programs and services. However, Anti-Industrial Agri-Technology organizations and Broad-Spectrum Alternative agrifood organizations were significantly more likely to engage a political consumerism strategy (70 and 36 percent respectively), encouraging constituents to utilize their personal consumption patterns as a tactic to foster agrifood systems change. Although consumption choices are embedded in issues common to the Status Quo and Food Access organizations, the political value of these choices is not highlighted, as these organizations are significantly less likely to use the political consumerism approach. Across all six clusters, direct action strategies including boycotts, protests, and demonstration marches were infrequent (12 percent); however, the proportion of Anti-Industrial Agri-Technology organizations using these forms of protest was significantly higher. One possible explanation is the large number of primarily animal rights organizations included in this cluster, and these organizations may apply direct action more readily than some other types of organizations (Wrenn 2013).

### *Arena*

In conjunction with the widespread use of political advocacy tactics, organizations across the clusters were highly likely to focus in the policy arena (83 percent), although Status Quo agrifood were more likely and Broad-Spectrum Alternative

agrifood organizations were less likely to do so (Table 5-7). However, at 61 percent, Anti-Industrial Agri-Technology organizations were much more likely than the other categories of organizations to directly target private firms. This finding corresponds to the higher propensity for direct action, as corporations and companies have historically been targets for protest activity (Walker et al. 2008). Corresponding with their high proportion of the political consumerism tactic, Anti-Industrial Agri-Technology organizations were significantly more likely to target the marketplace as an arena to foster agrifood change, but this pattern did not hold for Broad-Spectrum Alternative agrifood organization. Although significantly less likely to support political consumerism, the Status Quo agrifood sector had a strong orientation to the marketplace (72 percent) as an arena to influence the agrifood system.

### *Membership Structure*

The data show several divergent membership patterns. Status quo agrifood organizations were significantly more likely than other clusters to include organizational or institutional members, including other associations and companies, likely an indicator of trade associations belonging to this cluster. Although 40 percent of Status Quo agrifood organizations also included formalized individual memberships, this figure is significantly less than the overall proportion (Table 5-7). Environmental organizations, on the other hand, were significantly more likely to have individual members, which may in part explain why this cluster also has significantly higher budgets and program revenues as described in the resources section above, as dues paying members can provide organizations a steady revenue stream (McCarthy and Zald 1977). In addition,

Environmental agrifood organizations were more likely to employ a decentralized structure that includes organizational affiliates and chapters at the sub-national level. This design may have multifaceted benefits for Environmental agrifood organizations including sub-national points of entry for potential members, access to additional resources, and a broad base of potential constituents who can engage with issues and campaigns put forth by the organization (Lee 2009).

### *Adherents*

Each of the six clusters was significantly different from the rest in at least one of the adherent measures. Status quo agrifood organizations, again likely resulting from a trade association model, were highly likely to have private firms as adherents (83 percent). They also, like Broad-Spectrum Alternative agrifood organizations, included growers as key adherents at significantly higher rates than the overall proportion. Along with grower adherents, the Broad-Spectrum Alternative agrifood cluster had the most diverse adherent pool, including disproportionately more general public and school and community-based adherents, which logically befits the Broad-Spectrum of issues this cluster features. Diet-related and food security organizations tend toward engaging researchers, scientists and the medical profession at higher rates than the other clusters, and this proportion is likely tied most directly to the medical profession, as some of the issues taken on by these organizations have a natural tie to public health advocacy. Food access organizations, on the other hand, are significantly less likely to engage these same adherents, and this cluster demonstrates a more mixed-adherent approach including the public (60 percent), private firms (25 percent), and community-based associations and

schools (44 percent), although only the latter was significantly different than the overall proportion. Environmental agrifood organizations were similar to the Food Access cluster in this way, engaging a broad range of adherents. However, relative to the other groups, the Environmental agrifood cluster also incorporated government-based adherents significantly more (23 percent). With an emphasis on farmland preservation, climate change adaption, and conservation compliance policies, the Environmental agrifood organizations likely see advantages to engaging government regulators and officials who inform land use policies at various scales of government. Finally, Anti-Industrial Agri-Technology organizations differed from the others by their almost singular approach to drawing from public adherents, as 96 percent of these organizations feature public engagement in some way.

## **Discussion**

The cluster analyses described in Chapter Four highlighted convergent and divergent patterns of issue orientation, operationalized as prognostic framing, across a sample of 690 national agrifood organizations. In this chapter, comparisons across these clusters have further demonstrated differences in resources and strategy, which I argue are key factors for understanding the mesomobilization potential of national agrifood organizations based on the different ways they frame their activities within the national agrifood organizational field. In the remainder of this chapter, I discuss these implications for understanding the mesomobilization potential of national agrifood organizations, but I begin by summarizing the resource strategy findings into descriptive profiles. In an effort to better understand and describe the national agrifood organizational field, these profiles



demonstrate how comparative differences in resources and strategies correspond with diverse issue orientations among organizations in the field.

### *Agrifood Cluster Profiles*

Status quo agrifood organizations were identified in the three-cluster solution, and this group of 156 organizations was not further split in the subsequent interpretation of the cluster hierarchy at the six-cluster level. The commonality among these organizations was issue overlap across the positions described as “status quo” in the literature (hence the cluster label). However, small proportions of Status Quo perspectives were present in organizations found in the other clusters. Relative to Nutrition and Food Access and Alternative Agrifood organizations (and by extension their sub-clusters), Status Quo agrifood organizations were significantly older and less dependent on outside sources of funds, generating contributions through program revenue. Although their budgets were not significantly larger than organizations in other clusters, they spent significantly more money lobbying and supporting federal election candidates. They also had fewer staff members (both in total and relative to budget size) and were more likely to receive support from Fortune 500 companies with agrifood portfolios.

Significantly more organizations in the Status Quo agrifood cluster were primarily focused on agrifood issues. As suggested by their proclivity for lobbying and donating to election campaigns, they focused their activities on political advocacy more strongly than other organizational clusters. They also focused on the marketplace as a venue for agrifood systems change, endorsing policies and programs that build the market for particular products and industries. They also represented private firms at significantly

higher rates than the other clusters, and they were significantly more likely to have grower adherents.

This description suggests that conventional agrifood organizations were largely comprised of agrifood producer organizations and trade associations that lobby and advocate for particular industries within the agrifood sector. Associations of this nature have a long history in the agrifood political realm, but they may not wholly represent Status Quo agrifood interests as some may align more clearly with other perspectives (see Browne 1988: 28-38). In other words, many Status Quo agrifood organizations in this analysis were producer and trade association groups, but not all producer and trade association groups were Status Quo agrifood organizations. These organizations may not always agree on specific policies and programs, particularly as representatives of potentially competing industries, but on the issues identified in this research, their widespread sharing of issues is an indication of sharing a particular orientation to status quo approaches to agrifood issues. Well-known organizations within this cluster include the American Farm Bureau Federation, National Cattlemen's Beef Association, and National Corn Growers Association. In addition, some newer organizations with specific interests like the Biotechnology Industry Organization were cast as Status Quo agrifood organizations based on their viewpoints on the agrifood issues in this research.

Additional cluster profiles are drawn from the six-cluster solution, and comparisons often refer to the non-Status Quo agrifood clusters in the data (hereafter "the sub-clusters" to refer to the five clusters that comprise the Nutrition and Food Access and Alternative agrifood clusters from the three-cluster solution). Among these, Environmental agrifood organizations (N=79) stood out as having the most resources

among the sub-clusters. These organizations were older and had significantly higher budgets than all but organizations in the Status Quo agrifood and Nutrition and Food Access cluster, also receiving significantly higher levels of funding from government sources. They also spent the most on lobbying and federal election contributions among the sub-clusters, although this difference was not significant in all comparisons. These Environmental organizations were the least likely to focus primarily on agrifood issues, often with other environmental issues a priority among their policy and programmatic efforts. They had the highest rates of individual members and were more apt to employ a federated structure of affiliates and chapters. Their adherent base was eclectic, with over 20 percent of each adherent category represented, except growers, which were represented in 19 percent of these organizations.

The Environmental agrifood organizations in the research stand out relative to the other sub-clusters for the high proportion that do not primarily emphasize agrifood issues. These include organizations like The Sierra Club and Environmental Defense Fund. They may better be thought of as environmental movement organizations, and their overlapping interest on agrifood issues is suggestive of Alternative agrifood issues spilling over into other social movement efforts. Spillover can have potentially important effects as more established movements (in this case, the environmental movement) can influence the tactics, opportunity structures, and outcomes of subsequent movements (Meyer and Whitter 1994). However, this process may implicitly prioritize environmental issues at the expense of other agrifood movement goals that do not so clearly nest within the environmental movement paradigm. Social movement spillover in alternative agrifood movements will be further discussed in the conclusion (Chapter

Seven), as this separation of an exclusive Environmental agrifood cluster from other agrifood organizations may have potentially important implications. As shown below, agrifood movement spillover is not limited to just the environmental movement, and the potential importance of spillover more generally in agrifood movements merits investigation. In addition to environmental movement organizations, the Environmental agrifood cluster includes several primary agrifood organizations that focus more on environmental issues including the National Association of Conservation Districts and the Marine Stewardship Council.

The Anti-Industrial Agri-Technology cluster of organizations (N=56) had significantly smaller budgets than Environmental agrifood organizations and significantly less revenue from government and programmatic sources. They exhibited lower levels of lobbying and federal election contributions relative to most of the other organizational clusters and were significantly less likely to have received support from Fortune 500 agrifood companies. Strategically, these organizations stand out for their significantly higher likelihood to use direct action tactics in some way. This may include targeting private firms and the marketplace more generally, and they often subscribed to political consumerism approaches to seek agrifood systems change. Only 45 percent of these organizations were primarily focused on agrifood issues, and they have the highest proportion of the general public adherents (96 percent), while being least likely to have organizational memberships. Similar to Environmental agrifood organizations, this group included organizations more prominently associated with other social movement interests, in this case animal rights and environmental health organizations such as Animal Legal Defense Fund and Physicians Committee for Social Responsibility as

examples of each. In addition, organizations that primarily emphasize farm animal welfare, such as Humane Farming Association and limited issue organizations opposed to genetic modification like the Global Aquaculture Alliance were in this cluster.

The Diet-Related and Community Food Security organizations (N=148) had relatively larger budgets than other clusters with exception to the Environmental agrifood group. In part, this is a function of several large anti-hunger organizations belonging to this cluster including Feeding America which has the largest operating budget in the sample, over \$1.5 billion, as well as public health organizations like the American Diabetes Foundation and American Heart Association. On average they spend more on lobbying and federal election donations than other sub-clusters but these findings are not statistically significant, and they actually spent less on lobbying than Environmental agrifood organizations when non-parametric tests that adjust for skewness were applied. Like Environmental agrifood and Anti-Industrial Agri-Technology organizations, less than 50 percent of these organizations were primarily focused on agrifood issues, including several consumer advocacy groups like the Consumer Federation of America and Consumers Union, alongside some medical and public health organizations like those noted above. Not surprisingly, they were significantly more likely to have adherents from the science, research, and medical professions and significantly less likely to have grower adherents. This cluster also includes organizations significantly more likely to offer programs and services.

The Food Access organizations (N=133) were on average older than all but the Status Quo and Environmental agrifood organizations. This cluster was roughly at the median on resource measures compared to other clusters, but did receive a significantly

higher amount of revenue through programs compared to Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood organizations. They also spent significantly more dollars lobbying than the latter two organizational clusters. Strategically, the Food Access cluster presented few significant differences from overall proportions. Exceptions include a lower likelihood to apply a political consumerism tactic, and these organizations were also less likely to have individual memberships and adherents from the science, research, and medical communities. This cluster was in many ways the most diverse among the sub-clusters, including many organizations with fewer overall viewpoints, including federal entitlement support and food and farmworker support, but the former was the most frequently coded issue in the cluster. Organizations included many with an anti-poverty emphasis such as Community Action Partnership and Move for Hunger, as well as others focused on farmworker issues like Interfaith Worker Justice and Farmworker Support Committee.

Broad-spectrum Alternative agrifood organizations stand out from the four sub-clusters described above in several important ways. First, 69 percent of the organizations in this cluster primarily focused on agrifood issues, significantly higher than each of the other sub-clusters, which had proportions below 50 percent, but less than the Status Quo agrifood organizations that also featured primarily agrifood organizations prominently (85 percent). This group overall had the lowest level of resources among the clusters. The organizational operating budgets were significantly lower than for each other cluster except the Anti-Industrial Agri-Technology organizations. Relatedly, they had fewer staff, but interestingly their dollars per staff total average was significantly lower, indicating that these organizations require more staff on a per dollar basis than each of

the other clusters. They spent significantly less on lobbying and federal election contributions compared to most other clusters, and they had a significantly lower likelihood of receiving support from Fortune 500 companies. As primarily agrifood focused organizations, these groups tended to have grower adherents, but they were also significantly more likely to have the general public and community-based and school adherents also. They were also more apt to pursue political consumerism approaches. Prominent organizations in this cluster included the National Farmers Union, American Farmland Trust, and National Sustainable Agriculture Coalition, as well as several non-primary agrifood organizations more closely associated with the environmental movement such as Natural Resources Defense Council and Environmental Working Group.

#### *Mesomobilization Potential*

Mesomobilization potential refers to the potential for social movement organizations to act together to facilitate influence at levels beyond what they could do as individual organizations (Gerhards and Rucht 1992). Two key outcomes result when mesomobilization potential is acted upon: development of shared collective action frames and the collecting and sharing of material and human resources. In this research I argue that the cluster solutions described in Chapter Four account for the first of these outcomes, development of shared prognostic collective action frames. By analyzing the issue orientations of national agrifood organizations, this research has assembled clusters of organizations with shared prognostic collective action frames, based on the issues these organizations select to pursue change (or maintain the status quo) within the

agrifood system. In this chapter, the second facet of mesomobilization potential is explored in the form of the resources and strategies these clusters of organizations employ to pursue change in the agrifood system.

In much of the alternative agrifood movement literature, individual movements such as the “local food movement” or “anti-GMO movement” are studied. By analyzing issue framing across the national agrifood organizational field, I have presented an alternate approach to studying the family of alternative agrifood movements, since the nuanced ways organizations overlap in issue selection makes bounding them to specific movements difficult. In other words, as opposed to individual but related movements, this research analyzes the mesomobilization potential of the national agrifood organizational field based on similar prognostic framing. In this way, *potential* is key to the findings, as these organizations may not necessarily work in concert, but the issues they subscribe to point to the potential these clusters have to work together based on issue orientations that converge in the data.

Although many resource measures are applied, a general picture suggests several key findings that inform a mesomobilization approach. First, Status Quo agrifood organizations did not have significantly more resources than the other clusters, either at the three- and six-cluster levels. However, they did utilize more resources to lobby political leaders and support federal elections compared to Nutrition and Food Access and alternative agrifood organizations at the three-cluster level. At the six-cluster level, the data showed that Status Quo organizations spent significantly more dollars lobbying and on federal elections than both the Diet-Related and Community Food Security and Broad-Spectrum Alternative agrifood organizations (and also more than Anti-Industrial



Agri-Technology organizations for federal elections). On these measures, Environmental agrifood organizations had similar spending levels as Status Quo agrifood organizations, also significantly higher than the Broad-Spectrum Alternative agrifood organizations on both measures. Furthermore, Environmental agrifood organizations had significantly higher operating budgets than three of the five other clusters in the six-cluster solution. Based on membership structures, Status Quo agrifood organizations relied on organizational members for support, while Environmental agrifood organizations were buoyed by individual memberships. As a result, the data suggest that both Status Quo agrifood and Environmental agrifood organizations had particular resource advantages compared to other organizational clusters. The mesomobilization potential of Status Quo agrifood organizations and Environmental agrifood organizations benefits from these resource advantages.

Broad-spectrum Alternative agrifood organizations, on the other hand, overall had fewer resources to pursue their goals, suggesting less mesomobilization potential. Their median operating budget was the lowest in the six-cluster solution, and they had fewer paid staff both overall and relative to their budgets. They spent significantly less lobbying and on federal election campaigns compared to Status Quo and Environmental agrifood organizations, and in the aggregate they were the youngest organizational cluster. Relatedly, their strategic orientation was less likely to focus on advocacy and the policy arena and they pulled from a wider range of adherents. In terms of mesomobilization potential, these organizations framed their responses to the agrifood system the most broadly, but did so with the least amount of resources, suggesting potential difficulties mounting challenges to the status quo agrifood system.

As described in the cluster profiles above, each of the Diet-Related and Community Food Security, Food Access, and Anti-Industrial Agri-Technology clusters featured distinct strategic traits. Relative to the other clusters described above, their resource capacity generally fell between the more resource-rich Status Quo and Environmental agrifood clusters and the less resourced Broad-Spectrum Alternative agrifood organizations. These three clusters of organizations tended to focus on fewer overall issues and less than half of the organizations in each focused on agrifood issues primarily. For the Anti-Industrial Agri-Technology cluster, there was a tendency to take a more radical and private sector approach to agrifood change, as a significantly higher proportion of these organizations included direct action tactics (36 percent), targeting of private firms (61 percent), and the marketplace as an arena of change (71 percent). These traits may limit the mesomobilization potential of organizations in this cluster; this is the smallest cluster in the study with only 56 organizations. The mesomobilization potential of the Diet-Related and Community Food Security and Food Access organizations may be bolstered by the several large organizations included in each that skew their mean resource measures higher, but overall these clusters present moderate resource levels relative to the other clusters.

## **Conclusion**

This chapter built off of the cluster solutions developed in Chapter Four to compare the resource capacity and strategic orientations of national agrifood organizations that shared similar prognostic framings of agrifood issues. This analysis revealed many comparative differences across both the three- and six-cluster solutions. Overall, both Status Quo and Environmental agrifood organizations demonstrated higher

degrees of resource capacity on several measures, while Broad-Spectrum Alternative agrifood organizations had the lowest resource capacity level. The remaining three clusters from the six-cluster solution—Diet-Related and Community Food Security, Food Access, and Anti-Industrial Agri-Technology organizations—showed relatively moderate resource levels. Applying a mesomobilization perspective, the data suggested the two well-resourced organizational clusters to have distinct advantages in their mobilization efforts, while the Broad-Spectrum Alternative agrifood organizations may struggle given the relative paucity of resources at their disposal. In the next chapter, these possibilities are empirically analyzed by testing each of the three- and six-cluster solutions as independent predictors of the number of times an organization gives testimony at Congressional hearings related to agriculture and food.

## 6 Acceptance: Field-Level Analysis of Congressional Hearings Participation

In this chapter I present several regression analyses that build off the cluster solutions formed and discussed in Chapter Four to answer Research Question 3: *How issue orientation influence a national agrifood organization's likelihood of gaining acceptance from national political decision makers?* The purpose of this chapter is to understand if the group to which an organization is assigned influences its ability to “get a seat at the table” in the form of providing testimony at Congressional hearings. Gamson (1990:31-34) presents the notion of “acceptance” as a potential outcome for social movement organizations to suggest that the group attains a certain degree of recognition as a consultant, negotiator, or formal representative on the issues they seek to change. In this research, “acceptance” was operationalized as the number of times the organization appeared in Congressional hearings between 2009-2014. Unlike Gamson’s application, this study applied the notion of acceptance not only to social movement organizations, what Gamson called “challengers,” but also to all national-level agrifood organizations in the sample. By considering cluster membership as an independent variable, the results show how issue orientation is associated with political acceptance.

Below, two sets of analyses are presented. The first applies the three-cluster solution, with each organization in the sample belonging to either the Status Quo agrifood, Nutrition and Food Access, or Alternative agrifood clusters. The second analysis is the same, except I use the six-cluster solution to partition the national agrifood organizations into six groups, which include Diet-Related and Community Food Security, Food Access, Anti-Industrial Agri-Technology, Environmental agrifood, and Broad-

Spectrum Alternative agrifood categorizations alongside the Status Quo agrifood cluster, which remained unchanged in the three- and six-cluster solutions. This approach allows for analysis at both a broader conceptual level of the national agrifood field where the Nutrition and Food Access and Alternative Agrifood clusters demonstrated greater diversity within these clusters, in addition to the six-cluster solution with a more specific breakout of the organizational field. In both sets of analyses, four separate models are presented, featuring different groups of control variables: a) cluster membership only; b) cluster membership controlling for resource measures; c) cluster membership controlling for strategy variables; and d) cluster membership controlling for both resource and strategy measures (full model). I begin by presenting descriptive statistics for the subset of the national agrifood organization sample that consisted of only those organizations that targeted national policy (N=576). The analyses of each cluster solution follow, and the chapter concludes with a discussion of the findings.

### **Descriptive Statistics**

Descriptive statistics for the variables in the analysis are presented in Table 6-1. For categorical variables, only the proportion and standard deviations are shown. Thus, each mean represents the percentage of organizations in the sample with that feature. For skewed resource variables, namely budget size, lobbying expenditures, and federal election contributions, both the raw mean (in millions of dollars) and the natural log transformation of the data are presented. (Only the logged variables are included in the models.) The dependent variable, number of Congressional hearings an organization attended from 2009-2014, is a count variable whose value is zero for many organizations.

Table 6-1: Descriptive Statistics and Proportions, N=576

	Mean	Min	Max	Std Dev
<b>Dependent Variable: Hearings Attended</b>	1.77	0.00	95	5.314
<b>Three Cluster Solution</b>				
Status Quo	0.24			0.430
Nutrition and Food Access	0.41			0.492
Alternative Agrifood	0.35			0.477
<b>Six Cluster Solution</b>				
Status Quo	0.245			0.430
Diet-Related and Community Food Security	0.205			0.404
Food Access	0.203			0.403
Anti-Industrial Agri-Technology	0.073			0.260
Environmental	0.121			0.327
Broad-Spectrum Alternative	0.153			0.360
<b>Resource Variables (dollars in millions)</b>				
Age	46.69	2.00	167	33.165
Budget	\$21.74	\$0.001	\$1,559.47	95.600
Budget (log)	14.60	7.41	21.17	2.112
Dollars: Staff	\$0.56	\$0.00	\$36.08	2.667
Lobbying 2011-12	\$0.52	\$0.00	\$43.02	2.382
Lobbying 2011-12 (log)	5.66	0.00	17.58	6.281
Federal Election Contributions	\$0.58	\$0.00	\$94.47	5.155
Federal Election Contributions (log)	3.21	0.00	18.36	5.237
Fortune 500 Support	0.42			0.495
<b>Strategy Variables</b>				
Primary Agrifood Focus	0.53			0.5
<b>Tactics</b>				
Direct Action	0.14			0.342
Political Consumerism	0.18			0.382
Programs and Services	0.39			0.488
Private Sector Arena	0.18			0.382
<b>Membership Structure</b>				
Organizational Members	0.49			0.500
Individual Members	0.51			0.500
Federated/Affiliate	0.43			0.500
<b>Adherents</b>				
General Public	0.50			0.500
Private Firms	0.35			0.477
Science, Research, Medical	0.20			0.399
Government	0.11			0.310
School and Community-Based	0.29			0.454
Growers	0.23			0.418

Therefore the dependent variable is also skewed. Its skewness is corrected for in the negative binomial regression, so only the raw scores for this variable are shown in Table 6-1.

Noteworthy about the dependent variable is the wide range of hearings participation, led by the American Farm Bureau Federation, which appeared in 95 hearings during the study time period. Yet 330 (57 percent) of the national organizations in this study appeared in no hearings at all. The mean number of hearings attended was thus 1.77. Budget size was also highly skewed, with 27 organizations that had annual operating budgets over \$100 million, including one organization (Feeding America) at over \$1 billion, compared to 187 organizations (32 percent) with annual budgets under \$1 million. Similar skewness was also apparent in lobbying expenditures and federal campaign donation measures. Three-hundred twelve organizations (54 percent) reported no lobbying, while 293 organizations (51 percent) reported no federal campaign contributions.

Proportions of the strategy variables in the analysis showed several noteworthy findings about agrifood organizations as defined in this research. Roughly half (53 percent) were deemed to have a primary focus on agrifood issues. Data in this study suggest that many organizations have viewpoints on agrifood-related issues, but such concerns co-exist with broader concerns about other social and political topics including the environment, economy, non-agrifood industries, and consumer issues among others. The sample only included organizations that reported targeting their efforts at the federal government or political advocacy, so the remaining tactics included were in addition to those advocacy efforts, which may explain their relatively low percentages. Of these

secondary tactics, programs and services were the most common, as 39 percent of organizations that targeted the federal government also offered programs and services to constituents or members. One key finding from the adherents variables is that only 23 percent of the national organizations represented growers or agricultural producers. This suggests that many agrifood organizations span beyond just farmers to include consumers and other adherent groups.

### **Regression Analysis: Three Cluster Solution and Testimony at Congressional Hearings**

#### *Issue Orientation*

The series of models testing the correlation between issue orientation and appearances to give testimony at Congressional hearings reveal several findings related to agrifood issues in the three-cluster models (see Table 6-2). Most notably in all four models, organizations that primarily focused on Nutrition and Food Access issues were significantly less likely to be invited to hearings than the reference category, Status Quo agrifood organizations. This effect was strongest in the basic model without controls (Model 1), but even when controlling for resources alone (Model 2), strategy alone (Model 3) or the full model of all variables (Model 4), Nutrition and Food Access organizations were less likely than Status Quo agrifood organizations to gain access to the Congressional hearing process.



Table 6-2: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Three Cluster Solution, N=576 (Status Quo Cluster as Reference)

	Model 1	Model 2	Model 3	Model 4
<b>Agrifood Cluster (Status Quo as Reference)</b>				
Nutrition and Food Access	-1.573*** (.1355)	-.984*** (.1612)	-.932*** (.1805)	-.836*** (.2009)
Alternative Agrifood	-1.060*** (.1322)	-.259 (.1693)	-.621** (.1977)	-.236 (.2163)
<b>Resources Variables (dollars in millions)</b>				
Age		.005* (.0020)		.002 (.0023)
Budget (log)		.085* (.0376)		.248*** (.0493)
Dollar: Staff		-.058 (.1642)		-.227 (.1691)
Lobbying 2011-12 (log)		.080*** (.0122)		.075*** (.0130)
Federal Election Contributions (log)		.075*** (.0132)		.062*** (.0147)
Fortune 500 Support		.065 (.1498)		.009 (.1645)
<b>Strategy Variables</b>				
Primary Agrifood Focus			.291* (.1442)	.806*** (.1669)
<b>Tactics</b>				
Direct Action			-.633** (.2465)	-.337 (.2845)
Political Consumerism			.473** (.1669)	.186 (.1848)
Programs and Services			-.373** (.1282)	-.338* (.1441)
Private Sector Arena			.198 (.2217)	.074 (.2582)
<b>Membership Structure</b>				
Organizational Members			-.096 (.1585)	.256 (.1819)
Individual Members			.157 (.1359)	.073 (.1478)
Federated/Affiliate			.829*** (.1307)	.187 (.1457)

Table 6-3, continued

<b>Adherents</b>				
General Public			-.229 (.1785)	-.129 (.1899)
Private Firms			.363* (.1674)	-.463* (.1956)
Science, Research, Medical			-.309 (.1476)	-.122 (.1896)
Government			.284 (.2077)	.611** (.2209)
School and Community-Based			-.182 (.1575)	.033 (.1770)
Growers			.431** (.1447)	.628*** (.1593)
<b>Intercept</b>	1.363*** (.0937)	-1.794*** (.4928)	.282 (.2431)	-4.622*** (.7474)

Note: Table shows standardized beta coefficients (standard error)  
 \*\*\* $p < .000$ ; \*\* $p < .01$ ; \* $p < .05$

The relationship between Alternative agrifood organizations and Congressional hearing access was less clear. As expected and demonstrated in the model without controls, Alternative agrifood organizations were significantly less likely than Status Quo agrifood organizations to be invited to hearings. This relationship was also significant when controlling for the series of strategy variables in Model 3 such that regardless of strategy, Alternative agrifood organizations were still less likely to attain hearing access than Status Quo agrifood organizations, although the strategy controls lessened the effect ( $b = -1.060$  vs.  $-.621$ ). However, when controlling for resources both individually and in the full model, Alternative agrifood organizations were still less likely to appear in hearings than their Status Quo counterparts, but the effect was no longer significant. In sum, Alternative agrifood organizations were less likely to gain access to hearings than Status Quo agrifood organizations, but this relationship was largely explained by budget size, lobbying expenditures, and federal election contributions.

## *Resources*

The two models (Models 2 and 4) that include measures for resources showed that budget size, lobbying outlays, federal campaign contributions were significant predictors of Congressional hearing access. In both models, the more of each of these three resources that the organization had, the more likely the organization was to give hearing testimony. These findings correspond to expectations drawn from resource mobilization theory, which posits that organizations with larger budgets logically have more resources to invest in having a political presence (if they choose to), including lobbying activity and political donations. Organizations with more resources have mobilization advantages in many realms (Edwards and McCarthy 2004), and specific to this research, financial resources can aid outcome achievement (Johnson 2008; Martin 2001; Dixon 2008; McCammon et al. 2001).

A primary purpose of lobbying activity is to gain access to political decision makers, so it was expected that lobbying expenditures would be associated with access to Congressional hearings. Congressional witnesses are invited by legislators to appear in hearings, and lobbying activity is a direct way that relationships with these lawmakers are made. As described by Leyden (1995: 433), organizations “that get invited spend considerable effort establishing ties with committee staffers or members, and convince staffers or members that the information (or opinion) they wish to convey is relevant or important to the proceedings.” This analysis supports the view that those organizations that invest more resources in lobbying create opportunities to have their voices heard on agrifood issues, aligning with the literature that links lobbying activity to hearings access (e.g., Leyden 1995; Albert 2003).

Similar to the lobbying expenditures that help organizations create relationships with lawmakers that can lead to issue representation in the Congressional sphere, this research showed that political donations are also associated with political access. The scholarly literature on the influence of political donations suggests a complex relationship, “a maze of contradictions” (Baumgartner and Leech 1998: 133), which includes the potential to influence Congressional voting patterns (Witko 2006) and issue involvement (Esterling 2007), particularly when issues are not clearly in the public eye (Gordon 2001). While these data cannot show that PAC donation amounts directly shape the viewpoints of lawmakers, there is evidence that greater PAC contributions corresponded to gaining access at Congressional hearings, thereby creating the opportunity for organizations that make donations to get their views onto the public record.

The three other resource measures were not significant in the full model, but organization age was significant in Model 2. This would suggest that when also controlling for strategy, age is no longer a significant predictor of access to Congressional hearings. One potential explanation is that organizations in the sample that focus primarily on agrifood topics, a strong indicator of hearing access, tend also to be older organizations, which may explain why the age variable loses significance in Model 4. Similarly, having grower adherents was strongly associated with hearing access, and these organizations may also tend to be older in the aggregate across the dataset. These findings associated with strategy will be further elaborated below, but first it is useful to analyze how the resource findings may correspond with the issue orientation findings described above.

As shown in Chapter Five in Tables 5-2 and 5-3, Status Quo agrifood organizations had significantly higher median lobbying and federal campaign outlays than Alternative agrifood organizations. In addition, while the Kruskal-Wallis H test did not show a significant difference in overall budget between the two groups, the median budget level for Status Quo groups was also higher than for Alternative agrifood organizations (\$2.19 million vs. \$1.43 million). These findings may help to explain why Alternative agrifood organizations were significantly less likely to gain hearing access than Status Quo organizations in the base model, but not in the models with resource variable controls. While it is true that Alternative agrifood organizations have less access to hearings than Status Quo groups, this effect is likely explained by Alternative agrifood groups generally having lower amounts of the significant resource variables that correlate with hearing access. In addition, among organizations in the Alternative agrifood cluster that do gain hearing access, it is likely that they have higher budgets, lobbying expenditures, and campaign donation outlays.

### *Strategy*

Several strategy variables significantly predicted hearing access both when organizational resources are and are not included in the model. Not surprisingly, organizations that primarily emphasize agrifood topics in their issue selection are significantly more likely to be invited to agrifood hearings than those for whom agrifood issues are secondary to core foci such as poverty or the environment. As shown above in Table 6-1, 53 percent of the sample organizations were primarily focused on agrifood issues. This focused topical attention positioned such organizations to represent their issue areas more readily than organizations that addressed agrifood issues secondarily to

other issues. In addition, while not all primary agrifood issue organizations represented grower adherents, many did. Having grower adherents was a significant predictor of organizations access to Congressional hearings in both Model 3 and Model 4. In contrast, representing the general public or representing the science, research, and medical community were not significant in either model. As a result, although agrifood issues are not the exclusive terrain of production agriculture, these results suggest that producer perspectives were more highly sought after for hearing testimony. One potential outcome would be that organizations representing citizens, consumers, and the scientific, research, and medical communities must seek other channels than Congressional hearings to make their voices heard on national agriculture and food policy matters.

Among other adherent categories, private firm representation presented an interesting effect. When not controlling for resources, organizations with these adherents were significantly more likely to be represented in Congressional hearings. This result suggests that perspectives from various business sectors, often represented through trade associations, corresponded with hearing access. However, when the resources variables were included in the model, this relationship reversed direction, while remaining significant. One possible explanation is that the organizations that have private firms as adherents and that get invited to hearings also tend toward larger levels of resource capture (budget, lobbying, and election donations). The national agrifood organization sample includes many less resourced organizations that do not receive many or any invitations to Congressional hearings. Therefore, the effect of representing private firms appears conditioned by resource capacity.

In addition, in the full model (Model 4), organizations that included government adherents were significantly more likely to give testimony at Congressional hearings. One explanation for this result is that organizations with government adherents, such as local government officials and environmental regulators among others, offered important perspectives on food and agriculture policy issues that were deemed valuable in the hearing context. As many hearings concern regulatory change and implementation that may affect the roles and responsibilities of government entities, organizations that included government adherents would offer a necessary perspective to be included in the public record.

Only organizations in the overall sample that targeted the federal government were included in these models, so each tactic included in the analysis is in addition to this targeting of the state, which primarily occurs via political advocacy approaches (see Chapter Five, Table 5-4). Organizations that offered direct services and programs were significantly less likely to gain access to Congressional hearings. One interpretation of this finding is that such organizational activities can require significant staff and financial resources, which then shift political advocacy to a secondary goal. In this way, services-focused organizations may be spread too thinly to emphasize political advocacy or get overlooked by lawmakers who prioritize a more exclusive focus on advocacy. Several other tactical variables were significant in Model 3, but when controlling for resource measures in Model 4, showed no significant effect. This would suggest that the relationships between these tactics and hearing access are mitigated by the statistically significant resource measures.

Similarly, organizations with a federated or affiliate structure were also significantly more likely to gain access to hearings in the simpler model, but when controlling for resources, were not. Here again, we can conclude that those organizations with this type of decentralized structure also tend toward having more resources, in particular their overall budgets. These types of organizations with state and local chapters frequently appear at hearings, in particular agrifood “field” hearings that are held outside of Washington, DC. In addition, the federated and affiliate structure creates more sub-national opportunities for these organizations to foster relationships with lawmakers who in turn may be more prone to invite organizations from their home states and districts to appear in hearings.

The findings in the above analysis showed predictors of access to Congressional hearings based on a three-cluster solution. The three-cluster solution provides an interpretation of the data suggesting an agrifood field featuring issue convergence among broad categories of either Status Quo, Nutrition and Food Access, or Alternative Agrifood issue orientations. The Congressional hearings analysis for this solution provides helpful indications of how these general issue orientations predict acceptance from policymakers. In the next section, I present an analysis of the national agrifood organizational field that emphasizes additional diversity in issue orientations, recasting the Nutrition and Food Access and Alternative Agrifood clusters into sub-clusters providing a more granular view of the relationship between issue orientation and Congressional hearings access.



## **Regression Analysis: Six Cluster Solution and Testimony at Congressional Hearings**

The analysis presented below evaluates the relationship of issue orientation among six agrifood clusters on Congressional hearing participation. While the three cluster solution demonstrated the limitations of the common alternative-conventional binary often applied as shorthand to the agrifood field, the six-cluster solution revealed finer grained distinctions in how specific issue orientations structure commonalities and differences among national agrifood organizations. The following analysis seeks to understand which, if any of these sub-groupings of agrifood organizations are more or less likely to gain access to Congressional hearings on important agriculture and food issues.<sup>13</sup>

### *Issue Orientation*

In this analysis, the Status Quo agrifood cluster was again treated as the reference category. As shown in Table 6-3 (Model 1), with no controls, all five of the agrifood organization groups were invited to significantly fewer hearings than Status Quo organizations. This result echoes what was found in the model presented in Table 6-2, which is not surprising, as the five clusters presented in Table 6-3 were derived directly from the two earlier Nutrition and Food Access and Alternative agrifood groups of the three cluster solution. However, the standardized beta coefficients in Model 1 (Table 6-3) do present an ordering of the relationship, as Anti-Industrial Agri-Technology organizations have the strongest negative relationship to Congressional hearing

---

<sup>13</sup> Since the only change between the three-cluster and six-cluster models was the issue orientation variable, the significant relationships of resources and strategies on Congressional hearings in the former models remained in the latter, with only minimal change in b-values (See Tables 6-2 and 6-3). As a result, the discussion of resource and strategy effects for the three-cluster solution also applies in the six-cluster.

participation, followed by the Food Access, Diet-Related and Community Food Security, Broad-Spectrum Alternative agrifood, and Environmental agrifood groups in succession.

Results show that both with and without controls for either resource and strategy variables or both sets of variables, both the Diet-Related and Community Food Security and the Food Access organizations were significantly less likely than Status Quo agrifood organizations to appear in Congressional hearings. Although these two groups differ somewhat in their issue orientations, they were similar in terms of lower access to Congressional hearings. Since these two groups were the only components of the original Nutrition and Food Access cluster, and both were significantly less likely to appear before Congress, the evidence indicates they were quite similar in their ability to gain access to the hearing process.

Anti-Industrial Agri-Technology groups were less likely to appear in Congressional hearings in each of the four models even when controlling for all other factors. This suggests that organizations focused in this realm of agrifood politics encounter challenges if they attempt to access the federal policymaking arena. That this relationship remained significant when also controlling for resources and strategy indicates that issue orientation itself can be a significant negative determinant of hearing access; the significantly lower incidence of participation in hearings by Anti-Industrial Agri-Technology groups cannot be explained away either by their lower levels of resources or specific strategies associated with such organizations. They are similar to both categories of Nutrition and Food Access organizations in this way—for all three of these clusters, the issues they selected predicted their having less access to the Congressional hearing arena.

Table 6-4: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Six Cluster Solution, N=576 (Status Quo Cluster as Reference)

	Model 1	Model 2	Model 3	Model 4
<b>Agrifood Cluster (Status Quo Reference)</b>				
Diet-Related and Community Food Security	-1.481*** (.1641)	-.815*** (.1937)	-.693** (.2233)	-.656** (.2497)
Food Access	-1.674*** (.1708)	-1.185*** (.2006)	-1.128*** (.2015)	-1.000*** (.2263)
Anti-Industrial Agri-Technology	-2.328*** (.3084)	-1.583*** (.3570)	-1.923*** (.3752)	-1.273** (.4085)
Environmental	-.615*** (.1727)	.020 (.2070)	.017 (.2322)	.198 (.2471)
Broad-Spectrum Alternative	-1.168*** (.1717)	-.263 (.2140)	-1.018*** (.2430)	-.570* (.2691)
<b>Resource Variables (dollars in millions)</b>				
Age		.005* (.0021)		.001 (.0023)
Budget (log)		.073 (.0387)		.218*** (.0502)
Dollar: Staff		-.078 (.1611)		-.297 (.1694)
Lobbying 2011-12 (log)		.076*** (.0124)		.070*** (.0131)
Federal Election Contributions (log)		.085*** (.0140)		.073*** (.0152)
Fortune 500 Support		-.020 (.1544)		-.073 (.1688)
<b>Strategy Variables</b>				
Primary Agrifood Focus			.320* (.1475)	.806*** (.1703)
<b>Tactics</b>				
Direct Action			-.644* (.2581)	-.368 (.2927)
Political Consumerism			.613*** (.1757)	.299 (.1931)
Programs and Services			-.324* (.1311)	-.276* (.1463)
Private Sector Arena			.562* (.2391)	.352 (.2709)
<b>Membership Structure</b>				
Organizational Members			.020 (.1610)	.304 (.1841)
Individual Members			.124 (.1388)	.035 (.1494)
Federated/Affiliate			.766*** (.1328)	.167 (.1464)

Table 6-5, continued

<b>Adherents</b>				
General Public			-.189	-.089
			(.1815)	(.1918)
Private Firms			.370*	-.419*
			(.1736)	(.1991)
Science, Research, Medical			-.412*	-.179
			(.1788)	(.1917)
Government			.123	.533*
			(.2139)	(.2254)
School and Community-Based			-.237	-.022
			(.1642)	(.1816)
Growers			.529***	.664***
			(.1495)	(.1629)
<b>Intercept</b>	1.363***	-1.556**	.147	-4.220***
	(.0937)	(.5166)	(.2483)	(.7582)

\*\*\* $p < .000$ ; \*\* $p < .01$ ; \* $p < .05$

The propensity of Broad-Spectrum Alternative agrifood organizations to appear in Congressional hearings was more complicated than the three clusters just described. Controlling for strategies (Table 6-3, Model 3), the effect of being a Broad-Spectrum Alternative agrifood organization changed little from the base model with no controls; broad spectrum Alternative agrifood organizations had a significant disadvantage in hearing access compared to Status Quo organizations in both Model 1 and Model 3. However, when only controlling for budget, lobbying outlays, campaign donations and other resource measures, the significance of the effect of being a Broad-Spectrum Alternative agrifood organization dissipated; the lower probability of Congressional hearing access was explained not by issue orientation here, but mostly by organizational resources, namely lobbying expenditures, federal election contributions, and to a lesser degree, the age of the organization (Table 6-3, Model 2). The effect of being a Broad-

Spectrum Alternative agrifood organization returned to significance in the full model with controls for both resources and strategy, but the beta coefficient and significance level was noticeably reduced from both Models 1 and 3. When considering all the variables in the model (Model 4), Broad-Spectrum Alternative agrifood organizations were significantly less likely than Status Quo groups to appear in Congressional hearings, but this effect was more moderate relative to that for the Diet-Related and Community Food Security, Food Access, and Anti-Industrial Agri-Technology organizations.

*Table 6-6: Negative Binomial Regression of Agrifood Clusters on Number of Congressional Hearing Appearances, Six Cluster Solution, N=576 (Environmental Agrifood as Reference)*

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
<b>Agrifood Cluster (Environmental Agrifood Reference)</b>				
Diet-Related and Community Food Security	-.987*** (.1891)	-.876*** (.2174)	-.728*** (.2083)	-.870*** (.2339)
Food Access	-1.037*** (.1952)	-1.138*** (.2267)	-1.075*** (.2217)	-1.059*** (.2408)
Anti-Industrial Agri-Technology	-1.881*** (.3159)	-1.660*** (.3607)	-2.037*** (.3518)	-1.494*** (.3875)
Status Quo	.615*** (.1727)	-.020 (.2070)	-.017 (.2322)	-.198 (.2471)
Broad-Spectrum Alternative	-.726*** (.1930)	-.346 (.2272)	-1.116*** (.2260)	-.714** (.2691)
<b>Intercept</b>	.628*** (.1393)	-1.886** (.5674)	.204 (.2670)	-3.957*** (.7420)

\*\*\* $p < .000$ ; \*\* $p < .01$ ; \* $p < .05$

Note: Models 2-4 included all additional resource and strategy variables as in previous analysis (Table 6-3), but are omitted in display since values are identical to those in Table 6-3.

Environmental agrifood organizations were only significantly less likely to participate in Congressional hearings than Status Quo agrifood groups in the base model with no controls (Table 6-3, Model 1). This suggests that Environmental agrifood organizations enjoyed some advantage in hearing access, at least compared to the other non-Status Quo agrifood organization groups. As shown in Table 6-4, Model 4, when

changing the agrifood cluster reference category from Status Quo to Environmental agrifood, each of the four non-Status Quo clusters was significantly less likely to attain hearing access than Environmental agrifood organizations in the full model. Also, the significant relationships for each cluster variable remained the same in the other three models, so an Environmental agrifood issue orientation functioned similarly to a Status Quo agrifood issue orientation in terms of access to hearings.

However, the frequency with which all organizations appear before Congress is largely a function of not only issue orientation, but also resource capacity and particular strategic indicators. Importantly, having a primary focus on agrifood issues was a significant predictor of hearing access (Table 6-3, Model 4), and only 34 percent of Environmental agrifood organizations fit this description (see Table 5-7), compared to 85 percent of Status Quo organizations. As a result, the lower participation rate of Environmental agrifood organizations relative to Status Quo agrifood organizations shown in Model 1 likely dissipated with inclusion of this control variable.

## **Conclusion**

This chapter presented two separate regression analyses to test how mutually exclusive clusters of national agrifood organizations were associated with political acceptance of agrifood organizations (Gamson 1990), operationalized as the number of times an organization appeared at Congressional hearings related to food and agriculture issues. Results indicated that Status Quo agrifood organizations have a greater propensity to gain this acceptance. The data showed that Environmental agrifood organizations, compared to other agrifood clusters, also were more likely to appear in hearings. Notably, these analyses provided evidence of the great importance resources, particularly

budget size, lobbying expenditures, and federal campaign contributions have for national-level agrifood organizations to get a “seat at the table” for national food and agriculture policymaking. Few of the strategy measures demonstrated any significant effect on Congressional hearing access, but the strength of grower representation as an organization characteristic in the models suggests that organizations with farmer adherents, which often represent conventional production agriculture and commodity interests, have a relative advantage in gaining political acceptance compared to other national agrifood organizations.

## 7 Discussion and Conclusions

This dissertation has explored patterns of convergence and divergence among U.S. national-level agrifood organizations and the ability of these organizations to gain acceptance in national agrifood policymaking and politics. Applying concepts from the social movements research literature, I have described and analyzed the field of national agrifood organizations in several ways. First, the organizational sample was clustered into categories based on the ways national agrifood organizations framed their positions on timely agrifood issues, what I have termed organizational issue orientation. Two separate, but interrelated cluster solutions emerged and merited more detailed analysis. Second, for each of the two cluster solutions under study, those clusters were compared to demonstrate differences in resources and strategies across their varied issue orientations. This analysis informed understandings of the mesomobilization potential of organizations within the national agrifood field. Third, for each of the two cluster solutions, those agrifood clusters were analyzed as predictors of acceptance at the national policy level, operationalized as the number of times organizations had testified before Congress on agrifood issues during 2009-2014. In this final chapter, I discuss the main findings of the study and their implications. I also consider limitations of the research and present promising and needed directions for future research.

### **Main Findings**

#### *Bounding the National Agrifood Organizational Field: Convergence in Diversity*

Although scholars have convincingly argued that agrifood movements converge around a shared challenge of the status quo agrifood system and diverge in how to



challenge this system (see Constance et al. 2014a; Holt Gimenez and Shattuck 2011), systematic, empirical analysis of these patterns has been sparse. Research on alternative agrifood movements as a larger interrelated conglomeration of movements, what I term a social movement *family* (della Porta and Rucht 1995), has often focused on the conceptual framework of how transformation of the agrifood system might be possible (e.g., Holt Gimenez and Shattuck), oppositional vs. alternative ideological orientations (e.g., Allen et al. 2003), and assertions that more cohesion across movements would benefit their efforts (e.g., Buttel 1997; Friedland 2010). Empirically, a systematic assessment of the *organizations* that comprise these many related movements, particularly at the national-level, and the potential ways they do and do not converge across issues has been lacking. This dissertation research aimed to fill that gap. The emphasis on organizations, as opposed to a reified “movements” is critical, since it is organizations that frame issues, mobilize resources, and set strategies. As I have shown, these organizations cannot be neatly bound into agrifood movement categories like “local food movement” or “fair trade movement” when considering a wide range of agrifood issues.

Despite the presence of many inter-related alternative agrifood movements with different foci, many scholars have asserted a shared orientation against the status quo agrifood system that combines them together at least conceptually, if not practically, in some cases as a singular “movement” (see Constance et al. 2014a; e.g., Hassanein 2003; Henderson 2000; Levkoe 2014). Such viewpoints suggest a bifurcation between alternative agrifood movements, on one hand, and the status quo agrifood system, on the other. This research has challenged assumptions of such clear bifurcation by

systematically identifying, at the larger, most general level that a third type of national agrifood organization exists amongst the contrasting alternative agrifood and status quo organizational populations. This group of Nutrition and Food Access organizations tended to have interests in fewer overall issues outside of diet-related health and food access, but when they did, those other issues were split between Status Quo and Alternative agrifood perspectives. This finding not only challenges the bifurcated notion of agrifood politics but also suggests that these particular Nutrition and Food Access issues form a “middle ground” where organizations with Status Quo or Alternative agrifood viewpoints on other issues can find agreement.

Departing from the vast literature on individual movements in the Alternative agrifood movement family, this research presented new ways of categorizing the organizations comprising such movements, based on the ways they frame their response to the Status Quo agrifood system. This does not mean that the commonly described sub-movements (e.g., anti-GMO, fair trade, sustainable agriculture, etc.) do not exist, but rather that belonging to these movements cannot be easily bound when analyzing a wide breadth of agrifood issues. Instead, we see a group of organizations that might belong to *many* of these movements, what I’ve termed Broad-Spectrum Alternative agrifood organizations. In other cases, organizations isolated a smaller number of issues to focus on, differentiating them from this Broad-Spectrum group. In that regard, I found that organizations that opposed biotechnology often opposed CAFOs as well, and in many cases this occurred without interest in many other agrifood issues. Similarly, a group of Environmental agrifood organizations did not tend to target a wide range of agrifood topics, but instead to focus on selected ecologically-oriented issues. In addition, two

different groups of Nutrition and Food Access organizations were identified, those that focused on diet-related health *and* food access (often with support for community food security measures) and those that focused solely on issues around food access without making statements about diet.

### *Mesomobilization Potential*

At the field-level, considering all organizations with positions on the selected agrifood issues, the research demonstrated differences in prognostic collective action framing for national-level agrifood organizations. These differences appeared in the form of agrifood clusters that each demonstrated a similar issue orientation. I consider these clusters to represent various collections of mesomobilization potential, groups of actors with a shared collective action frame that could possibly work together to share supporters, financial resources, and further construct collective action frames to advance their causes (Gerhards and Rucht 1992). Status quo agrifood organizations are distinct from each of the other clusters (at both the three- and six-cluster levels), not because they have more resources (as operating budget did not show comparative significant differences), but because they acquire their resources and distribute them differently. These organizations relied upon program revenue and membership support for their income, as opposed to government, foundation, and individual donors, and they operated with fewer staff, and less overhead (as measured by the ratio of budget to staff members), while spending significantly more on lobbying and federal election contributions. They oriented their influence not only toward the federal policy realm, but also toward the

marketplace, and they were more apt to represent private firms and other organizational members.

The mesomobilization potential of the non-Status Quo clusters of agrifood organizations was instructive for demonstrating fundamental resource and strategic differences among organizations that challenge the status quo in some way.

Environmental agrifood organizations had significantly more resources and, like their Status Quo counterparts, were more apt to spend them on lobbying and federal elections, especially compared to Anti-Industrial Agri-Technology and Broad-Spectrum Alternative agrifood organizations. Broad-spectrum Alternative agrifood organizations had the least amount of resources among national agrifood organizations and strategically they were also less likely to focus on political advocacy and demonstrated the widest range of adherent types. From a resource mobilization perspective, these findings suggest mesomobilization advantages for Environmental agrifood organizations and disadvantages for Broad-Spectrum Alternative agrifood organizations.

The perspective on Nutrition and Food Access organizations is somewhat different. In the three-cluster solution, this cluster was the largest, suggesting that the issues central to this cluster generate a broader base of support. Viewing mesomobilization potential as a count of possible allies, Nutrition and Food Access organizations were well-positioned. On other resource measures, they were similar to Alternative agrifood organizations in the three-cluster solution, but these organizations were significantly more likely to include programs and services in their activities, likely through projects to improve diets, food access, and nutritional health outcomes.

The implications of these findings regarding mesomobilization potential suggest that both Status Quo agrifood and Environmental agrifood organizations were best positioned to mobilize on political advocacy. Each had specific resources, namely lobbying and federal election contribution capacity, that corresponded with influence on the federal political level. Broad-spectrum Alternative agrifood organizations and Nutrition and Food Access organizations (both as a single cluster and split into Diet-Related and Community Food Security and food access clusters at the six-cluster level) had less potential to mobilize at the national policy-level. For Broad-Spectrum Alternative agrifood organizations, the higher number of total issues these organizations took on may have effectively spread their resources too thinly, making such mobilization a challenge. This is a variation of Gamson's (1990: 44-46) argument that organizations with multiple-issue demands are less likely to attain positive outcomes; when the organization's goals are more extensive, it is more difficult to attain success. Similarly, Nutrition and Food Access organizations that are more apt to spread resources between advocacy and programs and services may also struggle to mount political challenges at the federal level. The relationship between agrifood clusters and political outcomes in this research further supports this finding.

#### *Acceptance and National Agrifood Organizations*

Gamson's (1990: 28) seminal work on political outcomes for social movement challengers argued that acceptance, being "valid[at]ed as] spokesman for a legitimate set of interests," is an attainable measure of success for some social movement organizations. This research expanded upon Gamson's work by approaching acceptance from a field-

level perspective that incorporates both challenger organizations and their status quo opponents. Fitting with the literature on Alternative agrifood movements, the expectation was that Status Quo agrifood organizations would have a higher preponderance of acceptance, and this research confirms this expectation at the bivariate level: the Status Quo agrifood cluster of organizations was more likely to give testimony at Congressional hearings related to agrifood issues than each of the other clusters, both at the three-cluster and six-cluster levels. However, when controlling for resources and strategic orientation, this was not always the case.

Nutrition and Food Access organizations, and their sub-clusters of Diet-Related and Community Food Security and Food Access clusters, in all models were less likely to gain access to Congressional hearings. For these types of organizations, attaining acceptance relative to Status Quo agrifood organizations was a clear challenge, and as intimated above, one potential reason may be these organizations' emphasis on program and service delivery along with political advocacy distracted them from an ability to gain access at the federal political level. Another possible explanation is that in many cases, the issues these organizations prioritized either were not often featured at Congressional hearings, or when they were, other organizations, either Status Quo or Alternative agrifood, were chosen to represent those issues.

For Alternative agrifood organizations at the three-cluster level and Environmental agrifood organizations at the six-cluster level, the findings were more mixed. The results demonstrated that when controlling for resources and strategies, other factors beyond issue orientation affected acceptance. The key determinants for access to Congressional hearings in these cases are budget size, lobbying outlays, federal election

contributions, having a primary focus on agrifood issues, and representing grower adherents. When Alternative agrifood organizations, particularly Environmental-focused ones, had high levels of resources, they were as apt to be included in Congressional hearings as Status Quo agrifood organizations. Despite findings that suggest a large array of organizations in the dataset that do not primarily emphasize agrifood issues (43 percent) or represent grower populations (76 percent), these two variables were highly correlated with giving Congressional testimony. Non-primary agrifood organizations may lend support at the mesomobilization level, but as representative voices on agrifood issues, they were less likely to gain this acceptance. In addition, the significance of the “grower” adherent variable suggests a bias toward groups with these adherents in national agrifood policymaking and politics, even though these issues clearly affect other populations such as consumers. In all cases, the results of this study indicate that for agrifood organizations to increase acceptance at the national-level, mobilizing material resources is a clear path.

### *Social Movement Spillover*

Social movement spillover refers to the way social movements may have influence on other movements seeking social change (Meyer and Whittier 1994). Scholarship on alternative agrifood movements has suggested that spillover, particularly from environmental, consumer, and anti-poverty movements, is a key trait of mobilization processes for agrifood change, including organic agriculture (e.g., Obach 2015), sustainable agriculture (e.g., Buttel 1997), and food justice (Alkon and Agyeman 2011). Findings in this research confirm that spillover of agrifood issues into other

movements is widespread. Forty-three percent of organizations in the sample did not primarily emphasize agrifood issues, instead including one or several agrifood positions, secondarily to other concerns. This suggests the permeability and broad appeal of agrifood issues beyond organizations that specifically feature agricultural producers or work primarily on food and/or agriculture issues. However, in terms of gaining acceptance on agrifood issues, these non-primary agrifood organizations were less likely to testify at Congressional hearings. Nonetheless, this study points to opportunities to bridge agrifood issues across movements as a way to attract more and varied sources of resources, tactics, and adherents.

### **Limitations**

In this research, I sought to analyze all U.S. national organizations with positions on key agrifood issues, which included many that appear in the alternative agrifood movement literature. Nonetheless, a limitation of this research is that there are likely more organizations with positions on the agrifood issues studied in this research that were not captured in the study sample. Although using the *Encyclopedia of Associations*, other lists of national agrifood organizations, and snowball methods likely returned a large proportion of fitting organizations, it is impossible to know if the sample for this study was complete. In particular, the *Encyclopedia* can lag several years before it includes newly founded organizations, so of those groups not included, it is likely that they were newer, which could bias some of the findings across the analyses (Martin et al. 2006).

In addition, while I selected 18 salient issues to approximate organizations' issue orientation, there are clearly additional issues that could have been included in the



research. Including more issues would have also expanded the sample population. For example, issue statements on agri-fuels could have been included in this analysis. If agri-fuels had been included as an issue, more organizations, particularly non-primary agrifood ones from the environmental movement, might also have fit the sample selection criteria. While I sought to bound the population of national agrifood organizations as appropriately and rigorously as possible, decisions to include and omit specific issues logically affected the population of organizations included in the sample. There is unknown potential for alternate results if other additional organizations had been included.

Organizations' issue statements were coded based on information they shared on their websites, and it is possible that organizations had positions on additional issues, but had not included them on their websites. There was also some potential for organizations' websites to no longer be current, leaving the possibility that additional, or even changed, issue statements were not included in this research. In lieu of having the time and financial resources to contact each organization directly, using websites as a data source allowed me to include a large sample of organizations in the research, and inasmuch as their position statements on their websites were accurate and current, to analyze their position statements to better understand issue orientation among national agrifood organizations.

Finally, the coding scheme for the issue statements allowed three potential outcomes—either they supported an issue, opposed the issue, or had no statement on the issue. This coding scheme could be considered crude given the complexity of the issue under examination. A more variegated, nuanced scale to highlight specific priorities or

stronger opinions on each issue would have improved the quality of the analysis of issue orientation. However, constructing and interpreting such a scale presented challenges for coding the data, and a simpler, and arguably more accurate, method was to use the basic three-category response as presented in this research.

### **Future Research**

This research lays the foundation for several directions in future empirical inquiry. First, this research has featured mesomobilization *potential* to identify clusters of organizations that frame solutions to agrifood issues similarly. Future research can analyze the actuality of that potential in the form of coalitions and networks of agrifood organizations across the national agrifood organizational field. Such research would help to identify patterns of relationships in the field and identify under what conditions organizations do and do not collaborate in relation to shared (or divergent) issue orientations. Case studies that analyze these networks in particular alternative agrifood movements such as the organic agriculture movement are promising steps (see Obach 2015), but there are further opportunities to extend the inquiry under the field more broadly (see Levkoe 2014 for a strong example in Canada).

Elsewhere, social movement and organizations scholars have analyzed changes in organizational populations longitudinally to evaluate patterns of organizational foundings, death rates, density, and transformations (e.g., Minkoff 1993, 1994, 1995; Johnson 2006, 2008, and Frickel 2011). Unlike these examples that draw sample populations from the *Encyclopedia of Associations*, the challenge for conducting similar research among national agrifood organizations is identifying the population of agrifood

organizations since they are not classed under a common heading in the *Encyclopedia*. By assembling a sample of agrifood organizations from multiple sources, my research provides a starting point to analyze longitudinal change among the agrifood organizational population both historically and into the future. In addition, also using longitudinal databases, social movements scholars have sought to identify additional outcomes resultant from social movement activity, including policy change, media coverage, and influences on public opinion. Within alternative agrifood movement research, conceptual arguments about the transformative potential of these movements has garnered growing attention (Constance et al. 2014a; Hinrichs and Eshleman 2014), and further research on the role of organizations in affecting outcomes beyond acceptance is a key next step building from this project.

This research has focused on the national organizational level, but agrifood politics and movements are clearly active at local, state, and international levels as well. What organizations work at these levels, how do they frame agrifood issues, and how able are they to gain acceptance from political leaders? Continued research applying similar methods as those in this project should be undertaken at other geographical scales. Finally, as suggested above, this project has provided evidence of strong currents of social movement spillover among national-level agrifood organizations. More in-depth research into the characteristics and implications of this spillover would provide new knowledge about the dynamics of agrifood politics, potentially informing the potential of agrifood organizations to foster sustained and effective challenges to the status quo agrifood system.

## Practical Implications: Concluding Remarks

This dissertation research has centered on concern to understand the organizational landscape and dynamics of national agrifood organizations. The research has shown that several hundred organizations are active nationally in agrifood policymaking and politics. At the same time, much of the agrifood studies literature has suggested that individuals' participation in these agrifood movements is often limited to efforts to change consumption patterns, which in turn limit the transformative potential of alternative agrifood movements (e.g., Guthman 2011; Johnston 2011). While that is a debate beyond the scope of this research, findings here demonstrate that national agrifood organizations have the potential to gain acceptance of their issue positions *when they have the resources* to pursue these avenues. The success of national-level efforts in agrifood politics will be bolstered when agrifood politics extends beyond the level of individual consumption, and that responsibility rests on both individual political action and organizations' ability to mobilize action in the national political realm. Although acceptance is an important step for organizations seeking to influence the agrifood system, it is clearly only a single step. Larger questions of how to translate this acceptance within the political system into genuinely transformative change remain, particularly when running up against the resources and political might of a private sector with much to gain by maintaining the status quo. Actualizing mesomobilization potential into coalitions with convergent perspectives on what needs to be changed and how to change it, across diverse issues and organizations, presents one hopeful possibility.

## References

Albert, K.W. 2013. "An Analysis of Labor Union Participation in U.S. Congressional Hearings." *Sociological Forum* 28: 574-596.

Aldenderfer, M.S. and R.K. Blashfield. 1984. *Cluster Analysis*. Newbury Park, CA: Sage.

Alkon, A.H. and J. Agyeman. 2011. *Cultivating Food Justice: Race, Class, and Sustainability*. Cambridge, MA: MIT Press.

Alkon, A.H. and C.G. McCullen. 2010. "Whiteness and Farmers Markets: Performances, Perpetuations . . . Contestations?" *Antipode* 43: 937-959.

Allen, P. 1999. "Reweaving the Food Security Safety Net: Mediating Entitlement and Entrepreneurship." *Agriculture and Human Values* 16: 117-129.

Allen, P. 2004. *Together at the Table*. University Park, PA: Penn State University Press.

Allen, P. 2008. "Mining for Justice in the Food System: Perceptions, Practices, and Possibilities." *Agriculture and Human Values* 25: 157-161.

Allen, P. 2014. Divergence and Convergence in Alternative Agrifood Movements: Seeking a Path Forward." In D.H. Constance, M.C. Renard, and M.G. Rivera-Ferre (eds) *Alternative Agrifood Movements: Patterns of Convergence and Divergence*. Bingley, UK: Emerald, pp. 49-68.

Allen, P., FitzSimmons, M., Goodman, M., and K. Warner. 2003. "Shifting Plates in the Agrifood Landscape: The Tectonics of Alternative Agrifood Initiatives in California." *Journal of Rural Studies* 19: 61-75.

Allen, P. and C. Hinrichs. 2007. "Buying into 'Buy Local': Engagements of United States Local Food Initiatives." In In Maye, D., Holloway, L. and M. Kneafsey (eds.) *Alternative Food Geographies: Representation and Practice*. New York, NY: Elsevier, pp. 255-272.

Allen, P. and C. Sachs. 1993. "Sustainable Agriculture in the United States: Engagements, Silences, and Possibilities for Transformation." In Allen, P. (ed) *Food for the Future: Conditions and Contradictions of Sustainability*. New York, NY: John Wiley & Sons, pp. 139-167.

Allison, P.D. 2002. *Missing Data*. Thousand Oaks, CA: Sage.

Amenta, E., Caren, N., Chiarello, E., and Y. Su. 2010. "The Political Consequences of Social Movements." *Annual Review of Sociology* 36: 287-307.

Amin, S. 2011. "Food Sovereignty: A Struggle for Convergence in Diversity." In Holt-Gimenez, E. (ed.) *Food Movements Unite! Strategies to Transform our Food Systems*. Oakland, CA: Food First Books, pp. xi-xviii.

Andrews, K.T. and B. Edwards. 2004. "Advocacy Organizations in the U.S. Political Process." *Annual Review of Sociology* 30: 479-506.

Atkinson, R. and J. Flint. 2004. "Snowball Sampling." In M.S. Lewis-Beck, A. Bryman, and T.F. Liao (eds) *The Sage Handbook of Social Science Research Methods*. Thousand Oaks, CA: Sage, pp. 1044-1045.

Bagdonis, J.M., Hinrichs, C.C., and K.A. Schafft. 2009. "The Emergence and Framing of Farm-to-School Initiatives: Civic Engagement, Health, and Local Agriculture." *Agriculture and Human Values* 26: 107-119.

Bain, C. and T. Danduchi. 2014. "Governing GMOs: The (Counter) Movement for Mandatory and Voluntary Non-GMO Labels." *Sustainability* 6: 9456-9476.

Barndt, D. 2003. "Whose 'Choice'? 'Flexible' Women Workers in the Tomato Food Chain." In Alexander, M.J., Albrecht, L., Day, S., and M. Segrest (eds). *Sing, Whisper, Shout, Pray!: Feminist Visions for a Just World*. Fort Bragg, CA: Edgework Books, pp. 62-80.

Baumgartner, F.R., and B.L. Leech. 1998. *Basic Interests: The Importance of Interest Groups in Politics and in Political Science*. Princeton, NJ: Princeton University Press.

Baumgartner, F.R. and C. Mahoney. 2005. "Social Movements, the Rise of New Issues, and the Public Agenda." In Meyer, D.S., Jenness, V., and H. Ingram (eds) *Routing the Opposition: Social Movements, Public Policy, and Democracy*. Minneapolis, MN: University of Minnesota Press, pp. 65-86.

Benford, R.D. 1993. "Frame Disputes Within the Nuclear Disarmament Movement." *Social Forces* 71: 677-701.

Benford, R.D. 1997. "An Insider's Critique of the Social Movement Framing Perspective." *Sociological Inquiry* 67: 409-430.

Benford, R.D. and D.A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26: 611-639.

Beus, C.E. and R.E. Dunlap. 1990. "Conventional versus Alternative Agriculture: The Paradigmatic Roots of Debate." *Rural Sociology* 55: 590-616.

Bonnano, A. and D.H. Constance. 2001. "Corporate Strategies in the Global Era: The Case of Mega-Hog Farms in the Texas Panhandle Region." *International Journal of Sociology of Agriculture and Food* 9: 5-28.

Brown, S. and C. Getz. 2008. "Privatizing Farm Worker Justice: Regulating Labor Through Voluntary Certification and Labeling." *Geoforum* 39: 1184-1196.

Browne, W.P. 1988. *Private Interests, Public Policy, and American Agriculture*. Lawrence, KS: University of Kansas Press.

Browne, W.P. 1995. *Cultivating Congress: Constituents, Issues, and Interests in Agricultural Policymaking*. Lawrence, KS: University of Kansas Press.

Burstein, P. and C.E. Hirsh. 2007. Interest Organizations, Information, and Policy Innovation in the U.S. Congress. *Sociological Forum* 22: 174-199.

Buttel, F.H. 1993. "The Production of Agricultural Sustainability: Observations from the Sociology of Science and Technology." In Allen, P. (ed) *Food for the Future: Conditions and Contradictions of Sustainability*. New York, NY: John Wiley & Sons, pp. 19-45.

Buttel, F.H. 1997. "Some Observations on Agro-Food Change and the Future of Agricultural Sustainability Movements." In D. Goodman and M.J. Watts (eds) *Globalising Food: Agrarian Questions and Global Restructuring*. New York, NY: Routledge, pp. 344-365.

Cadieux, K.V. and R. Slocum. 2015. "What Does it Mean to Do Food Justice?" *Journal of Political Ecology* 22: 1-26.

Clancy, K.L. 1993. "Sustainable Agriculture and Domestic Hunger: Rethinking a Link Between Production and Consumption. In Allen, P. (ed) *Food for the Future: Conditions and Contradictions of Sustainability*. New York, NY: John Wiley & Sons, pp. 251-293.

Coleman-Jensen, A., Rabbitt, M. Gregory, C., and A. Singh. 2015. "Household Food Security in the United States in 2014." USDA Economic Research Report, ERR-194.

Constance, D.H., Friedland, W.H., Renard, M.C., and M.G. Rivera-Ferre. 2014a. "The Discourse on Alternative Agrifood Movements." In Constance, D.H., Renard, M.C., and M.G. Rivera-Ferre (eds) *Alternative Agrifood Movements: Patterns of Convergence and Divergence*. Bingley, UK: Emerald, pp. 3-46.



Constance, D.H., Renard, M.C., and M.G. Rivera-Ferre. 2014b. *Alternative Agrifood Movements: Patterns of Divergence and Convergence*. Bingley, UK: Emerald.

Constance, D.H., Kleiner, A.M., and J.S. Rikoon. 2003. "The Contested Terrain of Swine Production: Deregulation and Reregulation of Corporate Farming Laws in Missouri." In Adams, J. (ed) *Fighting for the Farm: Rural America Transformed*. Philadelphia, PA: University of Pennsylvania Press, pp. 75-95.

Corder, G.W. and D.I. Foreman. 2014. *Nonparametric Statistics: A Step-by-Step Approach* (2nd ed.). Hoboken, N.J.: Wiley.

Cornfield, D.B. and H.J. McCammon. 2010. "Approaching Merger: The Converging Public Policy Agendas of the AFL and CIO, 1938-1955." In Van Dyke, N. and M.J. McCammon (eds) *Strategic Alliances: Coalition Building and Social Movements*. Minneapolis, MN: University of Minnesota Press, pp. 79-98.

Cress, D.M. and D.A. Snow. 1996. "Mobilization at the Margins: Resources, Benefactors, and the Viability of Homeless Social Movement Organizations." *American Sociological Review* 61: 1089-1109.

Cress, D.M. and D.A. Snow. 2000. "The Outcomes of Homeless Mobilization: The Influence of Organization, Disruption, Political Mediation, and Framing." *American Journal of Sociology* 105: 1063-1104.

Dalirsefat, S.B., A. da Silva Meyer and S.Z. Mirhoseini. 2009. "Comparison of Similarity Coefficients used for Cluster Analysis with Amplified Fragment Length Polymorphism Markers in the Silkworm, *Bombyx mori*." *Journal of Insect Science* 9: Article no. 71.

Darnhofer, I., Lindenthal, T., Bartel-Kratochvil, R. and W. Zollitsch. 2010. "Conventionalisation of Organic Farming Practices: From Structural Criteria Towards an Assessment Based on Organic Principles. A Review." *Agronomy for Sustainable Development* 30: 67-81.

DeLind, L.B. 1995. "The State, Hog Hotels, and the 'Right to Farm': A Curious Relationship." *Agriculture and Human Values* 12: 34-44.

DeLind, L.B. 2002. "Place, Work, and Civic Agriculture: Common Fields for Cultivation." *Agriculture and Human Values* 19: 217-224.

della Porta, D. and M. Diani. 2006. *Social Movements: An Introduction* (2nd ed). Malden, MA: Blackwell.

della Porta, D. and D. Rucht. 1995. "Left-Libertarian Movements in Context: A Comparison of Italy and West Germany, 1965-1990." In Klandermans, B. and C. Jenkins (eds) *The Politics of Social Protest: Comparative Perspectives on States and Social Movements*. Lanham, MD: Rowman & Littlefield, pp. 111-130.

Desmarais, A.A., Rivera-Ferre, M.G., and B. Gasco. 2014. "Building Alliances for Food Sovereignty: La Via Campesina, NGOs, and Social Movements." In Constance, D.H., Renard, M.C., and M.G. Rivera-Ferre (eds) *Alternative Agrifood Movements: Patterns of Convergence and Divergence*. Bingley, UK: Emerald, pp. 89-110.

Dice, L.R. 1945. "Measures of the amount of ecologic association between species." *Ecology* 26: 297-302.

Dixon, M. 2008. "Movements, Countermovements and Policy Adoption: The Case of Right-to-Work Activism." *Social Forces* 87: 473-500.

Dixon, J. 2009. "From the Imperial to the Empty Calorie: How Nutrition Relations Underpinn Food Regime Transitions." *Agriculture and Human Values* 26: 321-333.

Drewnowski, A. and S. Spector. 2004. "Poverty and Obesity: The Role of Energy Density and Energy Costs." *American Journal of Clinical Nutrition* 79: 6-16.

Duarte, J.M., J. Bosco dos Santos, and L.C. Melo. 1999. "Comparison of Similarity Coefficients Based on RAPD Markers in the Common Bean." *Genetics and Molecular Biology* 22: 427-432.

Duram, L. and L. Oberholzer. 2010. "A Geographic Approach to Place and Natural Resource Use in Local Food Systems." *Renewable Agriculture and Food Systems* 25: 99-108.

Edwards, B. and J.D. McCarthy. 2004. "Resources and Social Movement Mobilization." In D.A. Snow, S.A. Soule, and H. Kriesi (Eds.) *The Blackwell Companion to Social Movements*. Malden, MA: Blackwell, pp. 116-152.

Esterling, K.M. 2007. "Buying Expertise: Campaign Contributions and Attention to Policy Analysis in Congressional Committees." *American Political Science Review* 101: 93-109.

Evans, J.H. 1997. "Multi-Organizational Fields and Social Movement Organization Frame Content: The Religious Pro-Choice Movement." *Sociological Inquiry* 67: 451-469.

Everitt, B.S., S. Landau, M. Leese and D. Stahl. 2010. *Cluster Analysis* (5th ed). London, UK: Wiley.

Fligstein, N. and D. McAdam. 2011. "Toward a General Theory of Strategic Action Fields." *Sociological Theory* 29: 1-26.

Flint, C.G. and N. Krogman. 2014. "Contemporary Water Issues in Rural North America." In Bailey, C., Jensen, L., and E. Ransom (eds) *Rural America in a Globalizing World: Problems and Prospects for the 2010s*. Morgantown, WV: West Virginia University Press, pp. 190-207.

Franck, C., Grandi, S.M., and M.J. Eisenberg. 2013. "Agricultural Subsidies and the American Obesity Epidemic." *American Journal of Preventive Medicine* 45: 327-333.

Friedland, W.H. 2008. "'Chasms' in Agrifood Systems: Rethinking how we can Contribute." *Agriculture and Human Values* 25: 197-201.

Friedland, W.H. 2010. "New Ways of Working and Organization: Alternative Agrifood Movements and Agrifood Researchers." *Rural Sociology* 75: 601-627.

Friedmann, H. 2005. "From Colonialism to Green Capitalism: Social Movements and Emergence of Food Regimes." In Buttel, F.H. and P. McMichael (eds) *New Directions in the Sociology of Global Development*. New York, NY: Elsevier, pp. 227-264.

Gamson, W. 1990. *The Strategy of Social Protest* (2nd ed.). Belmont, CA: Wadsworth.

Ganz, M. 2000. "Resources and Resourcefulness: Strategic Capacity in the Unionization of California Agriculture, 1959-1966." *American Journal of Sociology* 105: 1003-1062.

Gerhards, J. and D. Rucht. 1992. "Mesomobilization: Organizing and Framing in Two Protest Campaigns in West Germany." *American Journal of Sociology* 98: 555-595.

Getz, C., Brown, S., and A. Schreck. 2008. "Class Politics and Agricultural Exceptionalism in California's Organic Agriculture Movement." *Politics and Society* 36: 478-507.

Gibbs, S.G., Green, CF, Tarwater, P.M., Mota, L.C., Mena, K.D., and P.V. Scarpino. 2006. "Isolation of Antibiotic-resistant Bacteria from the Air Plume Downwind of a Swine Confined or Concentrated Animal Feeding Operation." *Environmental Health Perspectives* 114: 1032-1037.

Gilbert, J., Sharp, G. and M.S. Felin. 2002. "The Loss and Persistence of Black-Owned Farms and Farmland: A Review of the Research Literature and Its Implications." *Southern Rural Sociology* 18: 1-30.

Goffman, E. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York, NY: Harper Colophon.

Goodman, D., DuPuis, E.M., and M.K. Goodman. 2012. *Alternative Food Networks: Knowledge, Practice, and Politics*. New York, NY: Routledge.

Goodman, D. and M. Goodman. 2007. "Localism, Livelihoods, and the 'Post-Organic': Changing Perspectives on Alternative Food Networks in the United States." In Maye, D., Holloway, L. and M. Kneafsey (eds.) *Alternative Food Geographies: Representation and Practice*. New York, NY: Elsevier, pp. 23-38.

Gordon, S.B. 2001. "All Votes Are Not Created Equal: Campaign Contributions and Critical Votes." *Journal of Politics* 63: 249-269.

Gottlieb, R. 2001. *Environmentalism Unbound: Exploring New Pathways for Change*. Cambridge, MA: MIT Press.

Gottlieb, R. and A. Fisher. 1996. "Community Food Security and Environmental Justice: Searching for a Common Discourse." *Agriculture and Human Values* 3: 23-31.

Gottlieb, R. and A. Joshi. 2010. *Food Justice*. Cambridge, MA: MIT Press.

Graham, J.W. 2009. "Missing Data Analysis: Making it Work in the Real World." *Annual Review of Psychology* 60: 549-576.

Gray, M. 2013. *Labor and the Locavore: The Making of a Comprehensive Food Ethic*. Los Angeles, CA: University of California Press.

Green, J.J., Green, E.M., and A.M. Kleiner. 2011. "From the Past to the Present: Agricultural Development and Black Farmers in the American South." In A.H. Alkon and J. Agyeman (eds) *Cultivating Food Justice: Race, Class, and Sustainability*. Cambridge, MA: MIT Press, 47-64.

Grossman, A. and V.K. Rangan. 2001. "Managing Multisite Nonprofits." *Nonprofit Management and Leadership* 11: 321-337.

Guptill, A. and R. Welsh. 2014. "The Declining Middle of American Agriculture: A Spatial Phenomenon." In Bailey, C., Jensen, L., and E. Ransom (eds) *Rural America in a Globalizing World: Problems and Prospects for the 2010s*. Morgantown, WV: West Virginia University Press, pp. 36-50.

Guthman, J. 2004. "The Trouble with 'Organic Lite' in California: A Rejoinder to the 'Conventionalization' Debate." *Sociologia Ruralis* 44: 301-316.

Guthman, J. 2008. "Neoliberalism and the Making of Food Politics in California." *Geoforum* 39: 1171-1183.

Guthman, J. 2011. *Weighing In: Obesity, Food Justice, and the Limits of Capitalism*. Berkeley, CA: University of California Press.

Guthman, J., Morris, A.W., and P. Allen. 2006. "Squaring Farm Security and Food Security in Two Types of Alternative Food Institutions." *Rural Sociology* 71: 662-684.

Guy, C., Clarke, G. and H. Eyre. 2004. "Food retail change and the growth of food deserts: a case study of Cardiff." *International Journal of Retail and Distribution Management* 32:72-88.

Hajer, M.A. 1995. *The Politics of Environmental Discourse*. Oxford, UK: Clarendon Press.

Hamm, M.W. and A.C. Bellows. 2003. "Community Food Security and Nutrition Educators." *Journal of Nutrition Education and Behavior* 35: 37-43.

Hannan, M.T. 1998. "Rethinking Age Dependence in Organizational Mortality: Logical Formalizations." *American Journal of Sociology* 104: 126-164.

Hansen, J.M. 1991. *Gaining Access: Congress and The Farm Lobby, 1919-1981*. Chicago, IL: University of Chicago Press.

Hansen, J.W. 1996. "Is Agricultural Sustainability a Useful Concept?" *Agricultural Systems* 50: 117-143.

Harrison, J.L. 2011. *Pesticide Drift and the Pursuit of Environmental Justice*. Cambridge, MA: MIT Press.

Harvey, D. 2005. *A Brief History of Neoliberalism*. Oxford, UK: Oxford Press.

Hassanein, N. 1999. *Changing the Way America Farms: Knowledge and Community in the Sustainable Agriculture Movement*. Lincoln, NE: University of Nebraska Press.

Hassanein, N. 2003. "Practicing Food Democracy: A Pragmatic Politics of Transformation." *Journal of Rural Studies* 77-86.

Hassanein, N. 2011. "Matters of Scale and the Politics of the Food Safety Modernization Act." *Agriculture and Human Values* 28: 577-581.

Haydu, J. 2011. "Cultural Modeling in Two Eras of U.S. Food Protest: Grahamites (1830s) and Organic Advocates (1960s-70s)." *Social Problems* 58: 461-487.

Henderson, E. 2000. "Rebuilding Local Food Systems From the Grassroots Up." In F. Magdoff, J.B. Foster, and F.H. Buttel (eds) *Hungry for Profit: The Agribusiness Threat to Farmers, Food, and the Environment*. New York, NY: Monthly Review Press.

Hendrickson, D., Smith, C., and N. Eikenberry. 2006. "Fruit and vegetable access in four low-income food deserts communities in Minnesota." *Agriculture and Human Values*, 23: 371-383.

Hinrichs, C.C. and R. Welsh. 2003. "The Effects of the Industrialization of US Livestock Agriculture on Promoting Sustainable Production Practices." *Agriculture and Human Values* 20: 125-141.

Hinrichs, C. and J. Eshleman. 2014. "Agrifood Movements: Diversity, Aims, Limits." In Bailey, C., Jensen, L., and E. Ransom (eds) *Rural America in a Globalizing World: Problems and Prospects for the 2010s*. Morgantown, WV: West Virginia University Press, pp. 138-155.

Hojnacki, M., Kimball, D.C., Baumgartner, F.R., Berry, J.M. and B.L. Leech. 2012. "Studying Organizational Advocacy and Influence: Reexamining Interest Group Research." *Annual Review of Political Science* 15: 379-399.

Holm, S. 1979. "A Simple Sequentially Rejective Multiple Test Procedure." *Scandinavian Journal of Statistics* 6: 65-70.

Holt, D.M. 2008. "Unlikely Allies Against Factory Farms: Animal Rights Advocates and Environmentalists." *Agriculture and Human Values* 25: 169-171.

Holt Gimenez, E. and A. Shattuck. 2011. "Food Crises, Food Regimes, and Food Movements: Rumbblings of Reform or Tides of Transformation?" *Journal of Peasant Studies* 38: 109-144.

Hoppe, R. 2014. "Structure and Finances of U.S. Farms: Family Farm Report, 2014 Edition." USDA Economic Research Service, EIB-132.

Hoppe, R.A. and P. Korb. 2013. "Characteristics of Women Farm Operators and Their Farms." USDA Economic Research Service, EIB-111.

Hunt, A.R. 2015. *Civic Engagement in Food Systems Governance: A Comparative Perspective on American and British Local Food Movements*. London, UK: Routledge.

Hunt, S.A. and P.H. Mooney. 2009. "Food Security: The Elaboration of Contested Claims to a Consensus Frame" *Rural Sociology* 74: 469-497.



Jackson, L. 1998. "Large Scale Swine Production and Water Quality." In Thu, K.M and E.P. Durrenberger (eds.) *Pigs, Profits, and Rural Communities*. Albany, NY: State University of New York Press, pp. 103-119.

Jaffee, D. 2007. *Brewing Justice: Fair Trade Coffee, Sustainability, and Survival*. Berkley, CA: University of California Press.

Jaffee, D. 2010. "Fair Trade Standards, Corporate Participation, and Social Movement Responses in the United States." *Journal of Business Ethics* 92: 267-285.

Jaffee, D. 2012. "Weak Coffee: Certification and Co-Optation in the Fair Trade Movement." *Social Problems* 59: 94-116.

Jaffee, D. and P.H. Howard. 2010. "Corporate Cooptation of Organic and Fair Trade Standards." *Agriculture and Human Values* 27: 387-399.

Jasper, J.M. 2004. "A Strategic Approach to Collective Action: Looking for Agency in Social Movement Choices." *Mobilization* 9: 1-16.

Johnson, E.W. 2006. "Changing Issue Representation among Major United States Environmental Movement Organizations." *Rural Sociology* 71: 132-154.

Johnson, E.W. 2008. *Social Movement Size, Organizational Diversity and the Making of Federal law*. *Social Forces* 86: 967-993.

Johnson, E. W. & Frickel, S. (2011). Ecological Threat and the Founding of U.S. National Environmental Movement Organizations, 1962-1998. *Social Problems*, 58(3), 305-329.

Johnston, J. 2008. "The Citizen-Consumer Hybrid: Ideological Tensions and the Case of Whole Foods Market." *Theory and Society* 37: 229-270.

Joshi, A., Azuma, A.M., and G. Feenstra. 2008. "Do Farm-to-School Programs Make a Difference? Findings and Future Research Needs." *Journal of Hunger & Environmental Nutrition* 3: 229-246.

Ketchen, D.J. and C.L. Shook. 1996. "The Application of Cluster Analysis in Strategic Management Research: An Analysis and Critique." *Strategic Management Journal* 17: 441-458.

Kirshenmann, F., Stevenson, G.W., Buttel, F., Lyson, T.A., and M. Duffy. 2008. "Why Worry about the Agriculture of the Middle? In T.A Lyson, G.W. Stevenson, and R. Welsh (eds) *Food and the Mid-level Farm: Renewing an Agriculture of the Middle*. Cambridge, MA: MIT Press, pp. 3-22.

Klandermans, B. 1992. "The Social Construction of Protest and Multiorganizational Fields." In Morris, A.D. and C.M. Mueller (eds) *Frontiers in Social Movement Theory*. New Haven, CT: Yale University Press, pp. 77-103.

Lee, B.H. 2009. "The Infrastructure of Collective Action and Policy Content Diffusion in the Organic Food Industry." *The Academy of Management Journal* 52: 1247-1269.

Lehrer, N. 2010. *U.S. Farm Bills and Policy Reforms: Ideological Conflicts Over World Trade, Renewable Energy, and Sustainable Agriculture*. Amherst, MA: Cambria Press.

Levkoe, C.Z. 2011. "Towards a Transformative Food Politics." *Local Environment* 16: 687-705.

Levkoe, C.Z. 2014. "The Food Movement in Canada: A Social Movement Network Perspective." *The Journal of Peasant Studies* 41: 385-403.

Levkoe, C.Z. and S. Wakefield. 2014. *Understanding Contemporary Networks of Environmental and Social Change: Complex Assemblages within Canada's 'Food Movement.'* *Environmental Politics* 23: 302-320.

Leyden, K.M. 1995. "Interest Group Resources and Testimony at Congressional Hearings." *Legislative Studies Quarterly* 20: 431-439.

Lichterman, P. 1995. "Piecing Together Multicultural Community: Cultural Differences in Community Building among Grass-Roots Environmentalists." *Social Problems* 42: 513-534.

Lobao, L. and K. Meyer. 2001. "The Great Agricultural Transition: Crisis, Change, and Social Consequences of Twentieth Century US Farming." *Annual Review of Sociology* 27: 103-124.

Lune, H. 2010. *Understanding Organizations*. Malden, MA: Polity Press.

Lyson, T.A. 2004. *Civic Agriculture: Reconnecting Farm, Food, and Community*. Medford, MA: Tufts University Press.

Lyston, T.A., Stevenson, G.W., Welsch, R. and A. Guptill. 2008. *Food and the Mid-level Farm: Renewing an Agriculture of the Middle*. Cambridge, MA: MIT Press.

Magnan, A. 2007. "Strange Bedfellows: Contentious Coalitions and the Politics of GM Wheat." *Canadian Review of Sociology* 44: 289-317.

Martin, A.W. 2001. "Resources for Success: Social Movements, Strategic Resource Allocation, and Union Organizing Outcomes." *Social Problems* 55: 501-524.

Martin, A., F. Baumgartner and J.D. McCarthy. 2006. "Measuring Association Populations Using the Encyclopedia of Associations: Evidence from the Field of Labor Unions." *Social Science Research* 35:771-778.

Martinez, S., Hand, M., DaPra, M., Pollack, S., Ralston, K., Smith, T., Vogel, S., Clark, S., Lhr, L., Low, S., and C. Newman. 2010. "Local Food Systems: Concepts, Impacts and Issues." USDA Economic Research Service, ERR-97.

Maye, D., Holloway, L., & Kneafsey, M. (eds) (2007). *Alternative Food Geographies: Representation and Practice*. New York, NY: Elsevier.

McAdam, D. and W.R. Scott 2005. "Organizations and Movements." In Davis, G.F., McAdam, D., Scott, W.R. and M.N. Zald (eds) *Social Movements and Organizational Theory*. New York, NY: Cambridge Univ. Press, pp. 4-40.

McCammon, H.J. 2001. "Stirring Up Suffrage Sentiment: The Formation of the State Woman Suffrage Organizations, 1866-1914." *Social Forces* 80: 449-480.

McCammon, H.J., K.E. Campbell, E.M. Granberg and C. Mowery. 2001. "How Movements Win: Gendered Opportunity Structures and U.S. Women's Suffrage Movements, 1866 to 1919."

McCarthy, J. D. 1996. "Constraints and Opportunities in Adopting, Adapting, and Inventing." In McAdam, D., McCarthy, J.D. and M.N. Zald (eds) *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*. New York, NY: Cambridge Univ. Press, pp. 141-151.

McCarthy, J. D., McPhail, Clark, and Smith, Jackie. 1996. "Images of Protest: Dimensions of Selection Bias in Media Coverage of Washington Demonstrations, 1982 and 1991." *American Sociological Review* 61: 478-499.

McCarthy, J.D. and M.N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82: 1212-1241.

McLaughlin, A. and P. Mineau. 1995. "The Impact of Agricultural Practices on Biodiversity." *Agriculture, Ecosystems & Environment* 55: 201-212.

McMichael, P. 2005. "Global Development and the Corporate Food Regime." In Buttell, F.H. and P. McMichael (eds) *New Directions in the Sociology of Global Development*. New York, NY: Elsevier, pp. 265-299.

Meyer, D.S. and S. Staggenborg. 2008. "Opposing Movement Strategies in U.S. Abortion Politics." *Research in Social Movements, Conflicts, and Change* 28: 207-238.

Meyer, D.S. and N. Whittier. 1994. "Social Movement Spillover." *Social Problems* 41: 277-298.

Micheletti, M. and D. Stolle. 2007. "Mobilizing Consumers to Take Responsibility for Global Social Justice." *Annals of the American Academy of Political and Social Science* 611: 157-175.

Minkoff, D.C. 1999. "Bending with the Wind: Strategic Change and Adaptation by Women's and Racial Minority Organizations." *American Journal of Sociology* 104: 1666-1703.

Minkoff, D.C. 1993. "The Organization of Survival: Women's and Racial-Ethnic Voluntarist and Activist Organizations, 1955-1985." *Social Forces* 71: 887-908.

Minkoff, D.C. (1994). *From Service Provision to Institutional Advocacy - The Shifting Legitimacy of Organizational Forms*. *Social Forces*, 72(4), 943-969.

Minkoff, D.C. (1995). *Interorganizational Influences on the Founding of African-American Organizations, 1955-1985*. *Sociological Forum*, 10(1), 51-79.

Minkoff, D.C. 2002. "The Emergence of Hybrid Organizational Forms: Combining Identity-Based Service Provision and Political Action." *Nonprofit and Voluntary Sector Quarterly* 31: 377-401.

Minkoff, D.C., Aisenbrey, S., and J. Agnone. 2008. "Organizational Diversity in the U.S. Advocacy Sector." *Social Problems* 55: 525-548.

Minkoff, D.C. and J.D. McCarthy. 2005. "Reinvigorating the Study of Organizational Processes in Social Movements." *Mobilization* 10: 289-308.

Mooney, P.H. and S.A. Hunt. 1996. "A Repertoire of Interpretations: Master Frames and Ideological Continuity in U.S. Agrarian Mobilization." *The Sociological Quarterly* 37: 177-197.

Mooney, P.H. and T.J. Majka, T. J. 1995. *Farmers' and Farmworkers' Movements: Social Protest in American Agriculture*. New York, NY: Twayne Publishers.

Mount, P. 2012. "Growing Local Food: Scale and Local Food Systems Governance." *Agriculture and Human Values* 29: 107-121.

Mount, P., Hazen, S., Holmes, S., Fraser, E., Winson, A., Knezevic, I., Nelson, E., Ohberg, L., Andree, P., and K. Landman. 2013. "Barriers to the Local Food Movement: Ontario's Community Food Projects and Capacity for Convergence." *Local Environment* 18: 592-605.

Muller, M., Tagtow, A., Roberts, S.L., and E. MacDougall. 2009. "Aligning Food Systems Policies to Advance Public Health." *Journal of Hunger and Environmental Nutrition* 4: 225-240.

Neff, R.A., Palmer, A.M., McKenzie, S.E., and R.S. Lawrence. 2009. "Food Systems and Public Health Disparities." *Journal of Hunger & Environmental Nutrition* 4: 282-314.

[NRC] National Research Council of the National Academies. 2010. *Toward Sustainable Agricultural Systems in the 21st Century*. Washington, D.C.: The National Academies Press.

Obach, B.K. 2015. *Organic Struggle: The Movement for Sustainable Agriculture in the United States*. Cambridge, MA: MIT Press.

Paarlberg, R. 2013. *Food Politics: What Everyone Needs to Know* (2nd ed). New York, NY: Oxford Press.

Perkins, H. 2012. "Neoliberalism and Local Food Systems: Understanding the Narrative of Hunger in the United States." In Reid, N., Gattrell, J.D., and P.S. Ross (eds) *Local Food Systems in Old Industrial Regions: Concepts, Spatial Context, and Local Practices*. Burlington, VT: Ashgate Publishing, pp. 191-208.

Pfeffer, M.J. and M.B. Lapping. 1995. "Prospects for a Sustainable Agriculture in the Northeast's Rural/Urban Fringe." In Schwarzweller, H.K. and T.A. Lyson (eds) *Sustaining Agriculture and Rural Communities*. Greenwich, CT: JAI Press, pp. 67-93.

Poppendieck, J. 1998. *Sweet Charity? Emergency Food and the End of Entitlement*. New York, NY: Penguin.

Raynolds, L.T. 2000. Re-embedding Global Agriculture: The International Organic and Fair Trade Movements. *Agriculture and Human Values* 17: 297-309.

Raynolds, L.T. 2009. "Mainstreaming Fair Trade Coffee: From Partnership to Traceability." *World Development* 37: 1083-1093.

Raynolds, L.T. 2012. "Fair Trade: Social Regulation in Global Food Markets." *Journal of Rural Studies* 28: 276-287.

Reisner, A. 2003. "Constructing Genetic Engineering in the Food and Fiber System as a Problem: Urban Social Movement Organizations as Players in Agricultural Discourse." In Adams, J. (ed) *Fighting for the Farm: Rural America Transformed*. Philadelphia, PA: University of Pennsylvania Press, pp. 229-251.

Renard, M.C. 2003. "Fair Trade: Quality, Market, and Conventions." *Journal of Rural Studies* 19: 87-96.

Rootes, C. 2004. "Environmental Movements." In D.A. Snow, S.A. Soule, and H. Kriesi (Eds.) *The Blackwell Companion to Social Movements*. Malden, MA: Blackwell, pp. 608-640.

Roth, B. 2010. "Organizing One's Own' as Good Politics: Second Wave Feminists and the Meaning of Coalition." In Van Dyke, N. and M.J. McCammon (eds) *Strategic Alliances: Coalition Building and Social Movements*. Minneapolis, MN: University of Minnesota Press, pp. 99-118.

Schreck, A., Getz, C., and G. Feenstra. 2006. "Social Sustainability, Farm Labor, and Organic Agriculture: Findings from an Exploratory Analysis." *Agriculture and Human Values* 23: 439-449.

Schurman, R. and W.A. Munro. 2010. *Fighting for the Future of Food: Activists Versus Agribusiness in the Struggle Over Biotechnology*. Minneapolis, MN: University of Minnesota Press.

Scott, W.R. 2004. "Reflections on a Half-Century of Organizational Sociology." *Annual Review of Sociology* 30: 1-21.

Shannon, K.L. Kim, B.F., McKenzie, S.E., and R.S. Lawrence. 2015. "Food System Policy, Public Health, and Human Rights in the United States." *Annual Review of Public Health* 36: 151-173.

Simonoff, J.S. 2003. *Analyzing Categorical Data*. New York, NY: Springer.

Skocpol, T. 2003. *Diminished Democracy: From Membership to Management in American Civic Life*. Norman, OK: University of Oklahoma Press.

Slocum, R. 2007. "Whiteness, Space, and Alternative Food Practice." *Geoforum* 38: 520-533.

Slocum, R. 2006. "Anti-Racist Practice and the Work of Community Food Organizations." *Antipode* 38: 327-349.

Snow, D.A. and R.D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1: 197-218.



Snow, D.A. and S.A. Soule. 2010. *A Primer on Social Movements*. New York, NY: Norton.

Sokal, R.R. and C.D. Michener. 1958. "A Statistical Method for Evaluating Systematic Relationships." *The University of Kansas Scientific Bulletin* 38: 1409-1438.

Sorensen, T. 1948. *A Method of Establishing Groups of Equal Amplitude in Plant Sociology Based on Similarity of Species Content and its Application to Analyses of the Vegetation on Danish Commons*. Copenhagen, Denmark: I Kommission hos E. Munksgaard.

Starr, A. 2010. "Local Food: A Social Movement?" *Cultural Studies: Critical Methodologies* 10: 479-490.

Stavi, I. and R. Lal. 2013. "Agriculture and Greenhouse Gases, a Common Tragedy. A Review." *Agronomy for Sustainable Development* 33: 275-289.

Stinchcombe, A. L. 1965. "Social Structure and Organizations." In March, J.G. (ed) *Handbook of Organizations*. Chicago, IL: Rand McNally, pp.142-193.

Stolle, D., M. Hooghe, and M. Micheletti. 2005. "Politics in the Supermarket: Political Consumerism as a Form of Political Participation." *International Political Science Review* 26: 245-269.

Story, M., Kaphingst, K.M., Robinson-O'Brien, R. and K. Glantz. 2008. "Creating Healthy Food and Eating Environments: Policy and Environmental Approaches." *Annual Review of Public Health* 29: 253-272.

Tan, P., M. Steinback, and V. Kumar. 2006. *Introduction to Data Mining*. Boston, MA: Addison-Wesley.

Tarasuk, V. and J.M. Eakin. 2005. "Food Assistance Through "Surplus" Food: Insights from an Ethnographic Study of Food Bank Work." *Agriculture and Human Values* 22: 177-186.

Tarrow, S.G. 2011. *Power in Movement: Social Movements and Contentious Politics* (3rd ed.). New York, NY: Cambridge University Press.

Trauger, A. "'Because They Can Do the Work': Women Farmers and Sustainable Agriculture." *Gender, Place, and Culture* 11: 289-307.

Trauger, A., Sachs, C., Barbercheck, M., Brasier, K. and N.E. Kiernan. 2010. "'Our Market is Our Community': Women Farmers and Civic Agriculture in Pennsylvania, USA." *Agriculture and Human Values* 27:43-55.

Tregear, A. 2011. "Progressing Knowledge in Alternative and Local Food Networks: Critical Reflections and a Research Agenda." *Journal of Rural Studies* 27: 419-430.

Tyler, V. and N. Van Dyke. 2004. "'Get Up, Stand Up': Tactical Repertoires of Social Movements." In D.A. Snow, S.A. Soule, and H. Kriesi (Eds.) *The Blackwell Companion to Social Movements*. Malden, MA: Blackwell, pp. 262-293.

USDA ERS. 2014. "Socially Disadvantaged Farmers: Race, Hispanic Origin, and Gender." Accessed online (September 4, 2015): <http://www.ers.usda.gov/topics/farm-economy/beginning-disadvantaged-farmers/socially-disadvantaged-farmers-race,-hispanic-origin,-and-gender.aspx#.VEaDsRax39V>.

Van Dyke, N. 2003. "Crossing Movement Boundaries: Factors that Facilitate Coalition Protest by American College Students, 1930-1990." *Social Problems* 50: 226-250.

Van Dyke, N. and M.J. McCammon. 2010. *Strategic Alliances: Coalition Building and Social Movements*. Minneapolis, MN: University of Minnesota Press.

Velten, S., Leventon, J., Jager, N., and J. Newig. 2015. "What is Sustainable Agriculture? A Systematic Review." *Sustainability* 7: 7833-7865.

Vitiello, D., Grisso, J.A., Whiteside, K.L., and R. Fischman. 2015. "From Community Surplus to Food Justice: Food Banks and Local Agriculture in the United States." *Agriculture and Human Values* 32: 419-430.

Walker, J.L. 1983. "The Origins and Maintenance of Interest Groups in America." *The American Political Science Review* 77: 390-406.

Walker, E.T., Martin, A.W., and J.D. McCarthy. 2008. "Confronting the State, the Corporation, and the Academy: The Influence of Institutional Targets on Social Movement Repertoires." *American Journal of Sociology* 114: 35-76.

Walker, E.T. and J.D. McCarthy. 2010. "Legitimacy, Strategy, and Resources in the Survival of Community-Based Organizations." *Social Problems* 57: 315-340.

Walker, R.E., Keane, C.R. and J.G. Burke. 2010. "Disparities and Access to Healthy Food in the United States: A Review of Food Deserts Literature." *Health & Place* 16: 876-884.

Wall, E. B. Smit. 2005. "Climate Change Adaptation in Light of Sustainable Agriculture." *Journal of Sustainable Agriculture* 27: 113-123.

Wilkins, J.L. 2009. "Civic Dietetics: Opportunities for Integrating Civic Agriculture Concepts into Dietetic Practice." *Agriculture and Human Values* 26: 57-66.

Williams, H. 2006. "Fighting Corporate Swine." *Politics & Society* 34: 369-397.

Wiltshire, K., Delate, K. and J. Flora. 2011. "Socio-cultural Aspects of Cow-Calf Operation Persistence in a Peri-Urban County in Iowa." *Renewable Agriculture and Food Systems* 26: 60-71.

Winne, M. 2008. *Closing the Food Gap: Resetting the Table in the Land of Plenty*. Boston, MA: Beacon Press.

Winson, A. 2010. "The Demand for Healthy Eating: Supporting a Transformative Food 'Movement.'" *Rural Sociology* 75: 584-600.

Witko, C. 2006. "PACs, Issue Context, and Congressional Decisionmaking." *Political Research Quarterly* 59: 283-295.

Wrenn, C.L. 2013. "Abolition Then and Now: Tactical Comparisons Between the Human Rights Movement and the Modern Nonhuman Animal Rights Movement in the United States." *Journal of Agricultural and Environmental Ethics* 27: 177-200.

Wright, W. and G. Middendorf. 2008. *The Fight Over Food: Producers, Consumers, and Activists Challenge the Global Food System*. University Park, PA: Penn State University Press.

Wright, W., M. Score, and D.S. Conner. 2007. *Food System Makers: Motivational Frames for Catalyzing Agri-Food Development through Multi-Stakeholder Collaboration*. *Community Development* 38: 39-59.

Youngberg, G. and S.P. DeMuth. "Organic Agriculture in the United States: A 30-Year Retrospective." *Renewable Agriculture and Food Systems* 28: 294-328.

Zurcher, L.A. and R.L. Curtis. 1973. "A Comparative Analysis of Propositions Describing Social Movement Organizations." *The Sociological Quarterly* 14: 175-188.

## **Appendix: Sample Population of National Agrifood Organizations, Organized by Six-Cluster Solution (N=690)**

### *Status Quo Agrifood (N=156)*

Agricultural Retailers Association  
Almond Hullers and Processors Association  
American Agri-Women  
American Association of Avian Pathologists  
American Association of Bovine Practitioners  
American Association of Cereal Chemists International  
American Association of Crop Insurers  
American Association of Meat Processors  
American Association of Small Ruminant Practitioners  
American Association of Swine Veterinarians  
American Bakers Association  
American Beverage Association  
American Council on Science and Health  
American Dairy Science Association  
American Enterprise Institute  
American Farm Bureau Federation  
American Feed Industry Association  
American Forest and Paper Association  
American Legislative Exchange Council  
American Malting Barley Association  
American Meat Institute  
American Meat Science Association  
American Peanut Council  
American Phytopathological Society  
American Seed Trade Association  
American Sheep Industry Association  
American Society of Agricultural and Biological Engineers  
American Society of Animal Science  
American Society of Farm Managers and Rural Appraisers  
American Society of Sugar Beet Technologists  
American Soybean Association  
American Spice Trade Association  
American Sugar Alliance  
American Veterinary Medical Association  
American Wholesale Marketers Association  
Animal Agriculture Alliance  
Animal Health Institute

Association of American Plant Food Control Officials  
Association of Equipment Manufacturers  
Association of Food Industries  
Biopesticide Industry Alliance  
Biotechnology Industry Organization  
Center for Food Integrity  
Chemical Producers & Distributors Association  
Coalition of Services Industries  
Committee for a Constructive Tomorrow  
Commodity Markets Council  
Corn Refiners Association  
Council for Agricultural Science and Technology  
Council for Biotechnology Information  
Council for Responsible Nutrition  
Cranberry Institute  
Crop Insurance and Reinsurance Bureau  
CropLife America  
Family Farm Alliance  
Farm Credit Council  
Farm Foundation  
Federation of Animal Science Societies  
Fertilizer Institute  
Flavor and Extract Manufacturers Association of the U.S.  
Food Export U.S.A.- Midwest  
Food Export U.S.A.- Northeast  
Food Marketing Institute  
Fresh Produce Association of the Americas  
Grocery Manufacturers Association  
Heritage Foundation  
Independent Professional Seed Association  
International Association of Refrigerated Warehouses/Cold Chain Alliance  
International Dairy Foods Association  
International Food Information Council  
International Franchise Association  
International Service for the Acquisition of Agri-biotech Applications  
National Agricultural Aviation Association  
National Alfalfa and Forage Alliance  
National Alliance of Forest Owners  
National Alliance of Independent Crop Consultants  
National Animal Interest Alliance  
National Aquaculture Association  
National Association of Animal Breeders  
National Association of Manufacturers

National Association of Wheat Growers  
National Barley Growers Association  
National Cattlemen's Beef Association  
National Chicken Council  
National Coalition for Food and Agricultural Research  
National Confectioners Association of the U.S.  
National Corn Growers Association  
National Cotton Council  
National Council of Agricultural Employers  
National Council of Commercial Plant Breeders  
National Fisheries Institute  
National Foreign Trade Council  
National Grain and Feed Association  
National Grocers Association  
National Institute for Animal Agriculture  
National Lamb Feeders Association  
National Milk Producers Federation  
National Oilseed Processors Association  
National Pest Management Association International  
National Pork Producers Council  
National Renderers Association  
National Restaurant Association  
National Retail Federation  
National School Boards Association  
National Sorghum Producers  
National Sunflower Association  
National Supermarket Association  
National Turkey Federation  
National Water Resources Association  
North American Equipment Dealers Association  
North American Export Grain Association  
North American Meat Association  
North American Millers' Association  
Northeast Agribusiness and Feed Alliance  
Northeast Dairy Foods Association  
Northeast Dairy Producers Association  
Northwest Food Processors Association  
Pet Food Institute  
Popcorn Institute  
Poultry Federation  
Poultry Science Association  
Public Lands Council  
Rice Millers' Association

Snack Food Association  
Southeastern Fisheries Association  
Southern Crop Production Association  
Southern Seed Association  
Southern U.S. Trade Association  
Southwest Council of Agribusiness  
Southwest Meat Association  
Sugar Association  
Sweetener Users Association  
Truth About Trade and Technology  
U.S. Beet Sugar Association  
U.S. Canola Association  
U.S. Cattlemen's Association  
U.S. Chamber of Commerce  
U.S. Dairy Export Council  
U.S. Dry Bean Council  
U.S. Durum Growers Association  
U.S. Farmers and Ranchers Alliance  
U.S. Grains Council  
U.S. Livestock Genetics Export  
U.S. Meat Export Federation  
U.S. Poultry and Egg Association  
U.S. Soybean Export Council  
U.S. Wheat Associates  
U.S.A. Dry Pea and Lentil Council  
U.S.A. Poultry and Egg Export Council  
U.S.A. Rice Council  
U.S.A. Rice Federation  
U.S.A. Rice Producers Association  
United Egg Producers/United Egg Association  
Weed Science Society of America  
Western U.S. Agricultural Trade Association  
Women Involved in Farm Economics

*Diet-Related and Community Food Security (N=148)*

Action for Healthy Kids  
Advocates for Better Children's Diets  
Afterschool Alliance  
Alliance for Preventive Health  
Alliance for Wellness ROI  
Alliance to End Hunger  
America on the Move Foundation



American Academy of Pediatrics  
American Association of Bariatric Counselors  
American Association of Diabetes Educators  
American Board of Obesity Medicine  
American Cancer Society Cancer Action Network  
American Clinical Board of Nutrition  
American College of Nutrition  
American Commodity Distribution Association  
American Community Gardening Association  
American Diabetes Association  
American Dietetic Association  
American Federation of State, County, and Municipal Employees  
American Federation of Teachers, AFL-CIO  
American Heart Association  
American Institute for Cancer Research  
American Medical Association  
American Medical Student Association  
American Nutrition Association  
American Planning Association  
American Public Health Association  
American Society for Nutrition  
American Society of Bariatric Physicians  
Apple Processors Association  
Asian & Pacific Islander American Health Forum  
Association of Jewish Family & Children's Agencies  
Association of State and Territorial Health Officials  
Bread for the World  
Brighter Green  
Calorie Restriction Society  
Campaign to End Obesity  
Center for Communications, Health & the Environment  
Center for Popular Research, Education, and Policy  
Center for Science in the Public Interest  
Charles Ray III Diabetes Association  
Chefs for Humanity  
Children's Defense Fund  
Congressional Hunger Center  
Consumer Federation of America  
Consumers Union  
Defeat Diabetes Foundation  
Diabetes Action Research and Education Foundation  
Diabetes Education and Camping Association  
Diabetes Sisters

Disciples Justice Action Network  
Earth Day Network  
Environment and Human Health Inc  
Fair Food Network  
Families U.S.A.  
Farm Sanctuary  
Farmers Market Coalition  
Feeding America  
First Focus Campaign for Children  
Food Research and Action Center  
FoodCorps  
Foundation for Diabetes Research  
Future Farmers of America  
Genetic Metabolic Dietitians International  
Health Care Without Harm  
Health Promotion Advocates  
Healthy Schools Campaign  
Heifer Project International  
ILSI Press  
Institute for a Sustainable Future  
Institute for America's Health  
Institute of Food Technologists  
International and American Associations of Clinical Nutritionists  
Jewish Council for Public Affairs  
Joslin Diabetes Center  
League of United Latin American Citizens Institute  
Manpower Demonstration Research Corporation (MRDC)  
Marathon Kids  
MAZON  
Meals on Wheels Association of America  
MEND Foundation  
Meridian Institute/AGree  
Mid-America Food Processors Association  
MomsRising  
National Association of County and City Health Officials  
National Association of Farmers' Market Nutrition Programs  
National Association of Nutrition and Aging Services Programs  
National Association of School Nurses  
National Association of Social Workers  
National Association of States United for Aging and Disabilities  
National Association of Working Women  
National Black Child Development Institute  
National CACFP Sponsors Association

National Center on Family Homelessness  
National Commodity Supplemental Food Program Association  
National Congress of Black Women  
National Congress of Parents and Teachers  
National Consumers League  
National Council of Jewish Women  
National Council on Aging  
National Dental Association  
National Extension Association of Family & Consumer Sciences  
National Grange  
National Head Start Association  
National Health Care for the Homeless Council  
National Hispanic Health Foundation  
National Hispanic Medical Association  
National Human Services Assembly  
National Immigration Law Center  
National Indian Health board  
National Latina Institute for Reproductive Health  
National Law Center on Homelessness & Poverty  
National League of Cities  
National Network of Public Health Institutes  
National Physicians Alliance  
National Rural Health Association  
National WIC Association  
National Women in Agriculture Association  
NEA Health Information Network  
Nemours  
Obesity Action Coalition  
Obesity Society  
Overeaters Anonymous World Service Office  
Partnership for Prevention  
Physicians Committee for Responsible Medicine  
PolicyLink  
Praxis Project  
Price-Pottenger Nutrition Foundation  
Produce for Better Health Foundation  
Project Food, Land and People  
Public Health Institute  
RESULTS  
Sargent Shriver National Center on Poverty Law  
Save the Children  
School Nutrition Association  
Shape America

Shape Up America  
Share Our Strength  
Society for Nutrition Education and Behavior  
Society for Public Health Education  
Society of St. Andrew  
Southeastern Food Processors  
Spoons Across America  
Take Off Pounds Sensibly  
Trust for America's Health  
United Fresh Produce Association  
Urban Farming  
Vegetarian Resource Group

*Food Access (N=133)*

AIDS United  
Alliance for Children and Families  
Alliance for Retired Americans  
America's Voice  
American Agriculture Movement  
American Association of University Women  
American Congress of Obstetricians and Gynecologists  
American Frozen Food Institute  
American Immigration Lawyers Association  
American Institute of Baking  
American Mushroom Institute  
American Nursery & Landscape Association /American Horticulture Association  
American Pistachio Growers  
American Public Human Services Association  
American School Health Association  
Americans for Democratic Action  
Americans for Immigrant Justice  
Association of Farmworker Opportunity Programs  
Association of Nutrition and Foodservice Professionals  
Association of Public and Land Grant Universities  
At-sea Processors Association  
Campfire U.S.A.  
Center for American Progress  
Center for Law and Social Policy  
Center for Popular Democracy  
Chef's Collaborative  
Cherry Marketing Institute  
Child Welfare League of America

Coalition of Human Needs  
Coalition of Immokalee Workers  
Community Action Partnership  
Corporation for Enterprise Development  
Council on Food, Agricultural and Resource Economics  
Direct Care Alliance  
Earthjustice  
Ecotrust  
Education Trust  
Every Child Matters  
Farm Labor Organizing Committee  
Farmworker Justice Fund  
Farmworkers Support Committee  
Fellowship of Reconciliation  
Gamaliel Foundation  
Generations United  
Global Workers Justice Alliance  
Health Outreach Partners  
Healthy Schools Network  
Healthy Teen network  
Immigration Equality Action Fund  
Independent Bakers Association  
Institute for Children, Poverty, and Homelessness  
Interfaith Worker Justice  
International Bottled Water Association  
International Brotherhood of Teamsters Brewery and Soft Drink Workers  
Conference  
Jobs with Justice/American Rights at Work  
Juice Products Association  
Kids Against Hunger  
Leadership Conference on Civil and Human Rights  
Leafy Greens Council  
League of Women Voters  
MAFO- National Partnership of Farmworker and Rural Organizations  
Midwest Food Processors Association  
Migrant Health Promotion  
Migrant Legal Action Program  
Moms Against Poverty  
Move For Hunger  
National Association for Equal Opportunity in Higher Education  
National Association For the Education of Homeless Children and Youth  
National Association for the Education of Young Children  
National Association of American Wineries/WineAmerica

National Association of County Human Services Administrators  
National Association of Local Boards of Health  
National Association of State Boards of Education  
National Association of State Departments of Agriculture  
National Center for Farmworker Health  
National Center for Law and Economic Justice  
National Coalition for the Homeless  
National Council of Community and Education Partnerships  
National Council of Farmer Cooperatives  
National Council of La Raza  
National Dairy Producers Organization  
National Day Laborer Organizing Network  
National Domestic Workers Alliance  
National Education Association  
National Employment Law Project  
National Foundation to End Senior Hunger  
National Frozen Pizza Institute  
National Grape and Wine Initiative  
National Guestworker Alliance  
National Latino Children's Institute  
National Legal Aid and Defender Association  
National Low Income Housing Coalition  
National Onion Association  
National Potato Council  
National Skills Coalition  
National Watermelon Association  
National Women's Health Network  
National Women's Law Center  
North American Blueberry Council  
North American Deer Farmers Association  
North American Raspberry and Blackberry Association  
North American Strawberry Growers Association  
Northwest Horticultural Council  
Nourish America  
OWL- The Voice of Midlife and Older Women  
Parents as Teachers  
Pathstone Corporation (U.S.A. Farmworker PAC)  
Poverty and Race Research Action Council  
Produce Marketing Association  
Rainforest Alliance  
Rock CAN Roll  
School Social Work Association of America  
School-Based Health Alliance

Service Employees International Union  
SingleStop U.S.A.  
Sojourners  
Southern Poverty Law Center  
Soyfoods Association of North America  
Stop Hunger Now  
Student/Farmworker Alliance  
Sugar Law Center for Economic and Social Justice  
Sustainable Food Trade Association  
The Arc of the United States  
U.S. Apple Association  
U.S.A. Harvest  
United Farm Workers of America  
United Food and Commercial Workers International Union  
USAction  
Western Alliance of Farmworker Advocates  
Western Growers Association  
Wider Opportunities for Women  
Workmen's Circle  
Yum-O Organization

*Anti-Industrial Agri-Technology (N=56)*

Action for Animals  
American Anti-Vivisection Society  
American Herbal Products Association  
American Humane Association  
American Pastured Poultry Producers Association  
American Society for Microbiology  
American Society for the Prevention of Cruelty to Animals  
American Vegan Society  
Animal Defenders International  
Animal Legal Defense Fund  
Animal Place  
Animal Welfare Advocacy  
Animal Welfare Institute  
Animals Voice  
Center for Environmental Health  
Compassion Over Killing  
Demeter Association  
Environmental Action  
Environmental Integrity Project  
Farm Animal Rights Movement

Farm Forward  
Food Alliance  
Food Animal Concerns Trust/Keep Antibiotics Working  
Friends of Animals  
Friends of the Earth  
Global Animal Partnership  
Global Aquaculture Alliance  
Green America  
Humane Education Network  
Humane Farm Animal Care  
Humane Farming Association  
Humane Society of the U.S.  
In Defense of Animals  
International Society for Animal Rights  
International Society for Cow Protection  
Jewish Vegetarians of North America  
Kinship Circle  
Last Chance for Animals  
Mercy for Animals  
Midwest Organic and Sustainable Education Service  
National Health Federation  
National Health Freedom Coalition  
National Humane Education Society  
Natural Products Association  
North American Vegetarian Society  
People for the Ethical Treatment of Animals  
Physicians Committee for Social Responsibility  
Public Citizen  
Public Justice  
Socially Responsible Agriculture Project  
STOP Foodborne Illness  
U.S. Public Interest Research Group  
United Poultry Concerns  
Waterkeeper Alliance  
Weston A. Price Foundation  
World Society for the Protection of Animals

*Environmental Agrifood (N=79)*

American Bird Conservancy  
American Corn Growers Association  
American Fisheries Society  
American Forest Foundation



American Forests  
American National CattleWomen  
American Rivers  
American Society of Agronomy  
American Society of Landscape Architects  
American Society of Plant Biologists  
American Sportfishing Association  
American Sugarbeet Growers Association  
American Water Works Association  
Association of Clean Water Administrators  
Association of Fish and Wildlife Agencies  
Association of Metropolitan Water Agencies  
Association of State Drinking Water Administrators  
Bat Conservation International  
Care U.S.A.  
Chesapeake Bay Foundation  
Clean Water Action  
Climate Counts  
Communicating for America  
Conservation Campaign  
Conservation Fund  
Conservation Law Foundation  
Conservation Technology Information Center  
Crop Science Society of America  
Defenders of Wildlife  
Ducks Unlimited  
Ecological Society of America  
Environmental and Energy Study Institute  
Environmental Defense Fund  
GrassWorks  
Great Lakes Fishery Commission  
Greenpeace U.S.A.  
Gulf and Caribbean Fisheries Institute  
Gulf Restoration Network  
Irrigation Association  
Izaak Walton League of America  
Land Trust Alliance  
League of Conservation Voters  
Marine Stewardship Council  
National Association of Clean Water Agencies  
National Association of Conservation Districts  
National Association of State Conservation Agencies

National Association of State Foresters  
National Association of Water Companies  
National Audubon Society  
National Fish and Wildlife Foundation  
National Parks Conservation Association  
National Wildlife Federation  
Native Seeds/SEARCH  
Nature Abounds  
Nature Conservancy  
Pacific Coast Federation of Fishermen's Associations  
Pacific Forest Trust  
Pacific Seafood Processors Association  
Pacific Shellfish Institute  
Pew Charitable Trusts  
Pheasants Forever  
Pollinator Partnership  
Remineralize the Earth  
Ruffed Grouse Society  
Seafood Choices Alliance  
Sierra Club  
Society for Range Management  
Society of American Foresters  
Soil and Water Conservation Society  
Soil Science Society of America  
Taxpayers for Common Sense  
Theodore Roosevelt Conservation Partnership  
Trout Unlimited  
Trust for Public Land  
Water Environment Federation  
Wildlife Management Institute  
Women Organizing for Change in Agriculture and Natural Resources Management  
World Resources Institute  
World Wildlife Fund

*Broad-Spectrum Alternative Agrifood (N=118)*

Accredited Certifiers Association  
American Cheese Society  
American Farmland Trust  
American Forage and Grassland Council  
American Honey Producers Association  
American Livestock Breeds Conservancy

American Public Works Association  
American Sustainable Business Council Action Fund  
Association for Enterprise Opportunity  
Bee Native  
Beyond Pesticides  
Bio-Integral Resource Center  
Biodynamic Farming and Gardening Association  
Bioneers/Collective Heritage Institute  
Black Farmers and Agriculturalists Association  
Center for Food Safety  
Center for Media and Democracy/Food Rights Network  
Center for Rural Affairs  
Center for Social Inclusion  
Citizens Trade Campaign  
Coalition for a Prosperous America  
Collaborative on Health and the Environment  
ColorofChange.org  
Cooperative Grocers' Information Network  
Cornucopia Institute  
Council of State Community Development Agencies  
Environment America  
Environmental Working Group  
Erosion Control Technology Council  
Fair Trade Federation  
Fair Trade Resource Network  
Family Farm Defenders  
Farm Aid  
Farm and Ranch Freedom Alliance  
Farm to Consumer Foundation  
Farm-to-Consumer Legal Defense Fund  
Federation of Southern Cooperatives Land Assistance Fund  
FishWise/Sustainable Fishery Advocates  
Food and Water Watch  
Food Chain Workers Alliance  
Food Democracy NOW!  
Grassroots International  
Green for All  
Hmong National Development  
Housing Assistance Council  
Independent Organic Inspectors Association  
Indian Nations Conservation Alliance  
Institute for Agriculture and Trade Policy  
Institute for Food and Development Policy

Institute for Social and Economic Development  
International Biochar Initiative  
International Seafood Sustainability Trade Association  
Intertribal Agriculture Council  
Josephine Porter Institute for Applied Bio-Dynamics  
Kitchen Gardeners International  
Land Institute  
League of Rural Voters  
Michael Fields Agricultural Institute  
Minorities in Agriculture, Natural Resources and Related Sciences  
National Association of Agricultural Educators  
National Association of Counties  
National Association of Development Organizations  
National Association of Regional Councils  
National Association of Resource Conservation and Development Councils  
National Association of Towns and Townships  
National Center for Appropriate Technology  
National Family Farm Coalition  
National Farmers Union  
National Hmong American Farmers  
National Rural Water Association  
National Sustainable Agriculture Coalition  
National Young Farmer Educational Association  
National Young Farmers Coalition  
Natural Resources Defense Council  
New England Small Farm Institute  
North American Farmers Direct Marketing Association  
Northeast Organic Dairy Producers Alliance  
Northeast Organic Farming Association  
Northern Plains Sustainable Agriculture Society  
Northwest Atlantic Marine Alliance  
Northwest Center for Alternative to Pesticides  
Ocean Conservancy  
Oceana  
Organic Consumers Association  
Organic Crop Improvement Association International  
Organic Farming Research Foundation  
Organic Seed Alliance  
Organic Seed Growers and Trade Association  
Organic Trade Association  
OrganicAthlete  
Organization for Competitive Markets  
Pesticide Action Network North America

Public Health Solutions/School Food Focus  
Rodale Institute  
Rural Advancement Foundation International U.S.A.  
Rural Coalition  
Rural Community Assistance Partnership  
Rural Roots  
Sales Exchange for Refugee Rehabilitation and Vocation  
Slow Food U.S.A  
Small Planet Institute  
Social and Environmental Entrepreneurs/Responsible Purchasing Network  
Soil Carbon Coalition  
Southern Sustainable Agriculture Working Group  
Sustainable Agriculture Education  
Sustainable Fisheries Partnership  
TransFair U.S.A.  
Union of Concerned Scientists  
United Stockgrowers of America Ranchers-Cattlemen Action Legal Fund  
Vision Earth Society  
Wallace Center/Winrock International  
Western Organization of Resource Councils  
Wholesome Wave  
Why Hunger  
Wild Farm Alliance  
Women, Food, and Agricultural Network  
World Environmental Organization  
World Wide Opportunities on Organic Farms U.S.A.

**VITA**  
**John T. Eshleman**

**EDUCATION**

- 2016 Ph.D. Rural Sociology with Dual-Title in Human Dimensions of Natural Resources and the Environment, The Pennsylvania State University
- 2013 Graduate Certificate in Survey Methodology, The Pennsylvania State University
- 2011 M.S. Rural Sociology, The Pennsylvania State University
- 2001 B.A. Sociology and Religion, Manchester College

**AWARDS and GRANTS**

- 2013 Rural Sociological Society Dissertation Research Award
- 2013 Francena N. Miller and Michael F. Nolan Graduate Scholarship in Agricultural Economics and Rural Sociology, Penn State University
- 2012 Penn State College of Agricultural Sciences Competitive Dissertation Grants Program
- 2011 Second Place Award, Penn State College of Agricultural Sciences Graduate Poster Exhibition, Social Sciences Division

**ACADEMIC and PROFESSIONAL SERVICE**

- 2012-14 Elected student representative to Agriculture, Food, and Human Values Society Council.
- 2012-13 Founding Vice-President; Penn State University Rural Sociology Graduate Student Association
- 2011 Brief Reviews Contributor; *Contemporary Sociology* 40(6)

**RESEARCH EXPERIENCE**

- 2015-16 Research Associate, Dept. of Crop Science, North Carolina State University .
- 2008-15 Graduate research assistant, Dept. of Agricultural Economics, Sociology & Education, The Pennsylvania State University.

**TEACHING EXPERIENCE**

- 2014 Instructor. SOC 432: Social Movements, Dept. of Sociology, Pennsylvania State University.
- 2009 Graduate Teaching Assistant. CED 152: Community Development Concepts and Practice. Dept. of Agricultural Economics & Rural Sociology, The Pennsylvania State University.

**PUBLICATIONS**

- Jones, K. and J. Eshleman. (In press). "Food Sovereignty: Governance and Exclusion in an Alternative Social Movement." In *Food System Governance: Challenges for Justice, Equality and Human Rights*, edited by A.L. Kennedy and J. Liljeblad. London: Routledge.
- Hinrichs, C. and J. Eshleman. 2014. "Agrifood movements: Diversity, aims, and limits." Pp. 138-155 in *Rural America in a Globalizing World: Problems and Prospects for the 2010s*, edited by C. Bailey, L. Jenson and E. Ransom. Morgantown, WV: West Virginia University.
- Hinrichs, C., Ready, R., Eshleman, J. and J. Yoo. 2012. *Pennsylvanians' Attitudes toward Renewable Energy*. Harrisburg, PA: Center for Rural Pennsylvania.