Social movement organizations in the local food movement: Linking social capital and movement support

by

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ABSTRACT

Social movement actors seeking alternatives to the highly industrialized, global food system have been advocating for more sustainable, local food systems. Many of the local food movement strategies and initiatives to counter the conventional practices of the industrial food system have proven successful. Social movement researchers have documented the importance of the roles and services social movement organizations provide for movement constituents to realize their success, emphasizing human and financial capital as key components for mobilizing collective action. Researchers have also documented the value of interorganizational networks, and the benefits of collaboration to expand the share of resources, and perhaps more importantly design social movement frames to direct collective action for social change. However, what local food movement research has yet to address are some of the potential barriers that minimize collaboration among organizational leaders as it relates to social capital and collective identity. This dissertation takes a cross-sectional, network analysis of social movement organizations working to increase the sustainability of the local food system in Marin County, California, a historically agricultural region serving a number of urban communities. Findings from the mixed-methods research reveal evidence of collective identity and social capital as enhancing collaboration among particular types of organizations while reducing potential collaboration among and between other social movement organizations. By analyzing the collective identity and dichotomous nature of social capital among social movement organizations, this research contributes a clearer understanding of the existing gaps for realizing a more sustainable local food system.

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CHAPTER ONE: INTRODUCTION

In recent decades the food system has become a subject of increased focus and attention among farmers, consumers, scholars, politicians, and others. Of primary interest have been the changing attitudes and subsequent behavior toward the composition of food chains that ultimately structure the varying types of food systems. Perhaps of greatest interest are the growing actions among individuals and groups to address the diverse concerns related to the globalized, industrial food system. The movement for the localization of food systems has become a global phenomenon as social institutions of media, education, government and economy all are responding to concern about the way we interact with our food. A variety of issues have been brought to the forefront of our political and healthcare agendas, such as labeling food to develop transparency for informed consumer choices about genetically modified foods (Shiva 2000; Bianchi 2004). Likewise, educators and families are growing more apprehensive about the quality of food their students and children are consuming (Story, Nanny, and Schwartz 2009; Jason 2012). At the same time, farmers and community members are interested in recapturing an economic advantage in the global commodity market to maintain their livelihoods, while conserving land, and promoting environmental and social justice on farms and in local communities (Allen et al. 2003; Bell 2004; Vallianatos, Gottlieb, and Haase 2004; Steel 2010). In sum, these are concerns about the complex industrial food system that is reliant upon a series of relationships all along the food chain. Organizations such as non-profits, have been working to support the mitigation of many of the aforementioned concerns in their regions and communities (Allen et al. 2003; Guthman 2008; Starr 2010). All of these efforts and more have helped shape what is referred to as the local food movement (Starr 2010), a contemporary social movement that aims to

change the U.S. and global agricultural landscape by altering the way we understand and interact with the multiple facets of our food system.

The objective of this dissertation is to explore the relationships among organizations working within the local food system of Marin County, CA and provide increased clarity about some of the factors relating to collaboration for supporting a more sustainable local food system. I will first continue with an overview of the development of the local food movement and how non-profit organizations as well as other formal organizations have played roles in the movement. I will then provide an overview of the geographical area of study. In Chapter 2, I will review social movement literature and link it to social capital theory, the theoretical foundation of the dissertation. In particular, two kinds of social capital—bonding and bridging social capital—will be analyzed, which directly relate to the network structure of organizations and help determine the dynamic relationships characterized by trust. This dissertation utilizes two phases of data gathering, which are elaborated in Chapter 3. The first phase, I use a survey to gather the opinions and perceptions of organizational directors' role and that of others within the local food movement in Marin County. In the second phase of data collection I incorporate face-to-face interviews of organizational directors to furnish a means of triangulating the findings from the first phase. In Chapter 4, I provide the findings from both phases of the research, which sets up Chapter 5, where I analyze and discuss the findings, which align with prior and current social movement research. I conclude this exploratory research with a discussion about the limitations of my findings, and recommendations for directing future research in the local food movement.

The Local Food Movement: An Alternative Agri-food Movement

The local food movement directly addresses what is considered an unsustainable, highly globalized industrial food system (Starr 2010). The difference between the local and the industrialized food system lies in the social, economic, and environmental interactions taking place within each food systems' individual food chains (see Figure 1.1).

Figure 1.1: Industrial Food System's Food Chain



The above graphic is a simplified depiction of the food chain of the industrial food system. The industrial food system is linear in structure, with each oval representing a link within the food chain. The chain begins with the production of food products at the farm level, i.e., harvesting and/or raising of animals, and ends with the disposal or waste of food items and bi-products. These two end points and each link in-between make up the food system and play a dynamic role in the level of sustainability of the food system. A more indepth discussion of sustainability and the relevance to a sustainable food system is discussed later in this chapter. Local food system advocates, both individuals and groups, have been addressing non-sustainable practices present along the food chain (Allen et al. 2003). Their actions have developed into a social movement directly linked to local food.

The local food movement is best understood as one of the sub-components of the alternative agri-food movement, which is perhaps one of the most diverse social movements of contemporary time (Allen 2010; Starr 2010). Social movements, which will be covered in more detail in the next chapter, can be understood as collectivities of people and their organizations (actors) working together to achieve social change (Olson 1965; Snow, Soule,

and Kriesi 2007; McAdam and Snow 2010). In the alternative agri-food movement, the inability of global and domestic institutions to address food system issues is the foundation of movement grievances (Allen 2010). More narrowly, actors focus on reforming the environmental, economic, and social deficiencies embedded in the conventional food system (Friedland 2010). One of the main focal points of the alternative agri-food movements is the localization of food that directly addresses the destructive and disempowering nature of large-scale political and economic relationships in conventional food systems (Allen 2010). The conventional food system is a large scale, highly mechanized mono-cropping system reliant upon agro-industrial inputs and government subsidies that produces high yielding crops for local, regional, national and global markets (Lyson 2004; Jarosz 2008). From a social justice perspective, the conventional system depersonalizes agriculture as both producer and consumer are alienated from their food source; growing, processing, and preparing food for consumption has become a lost skill (Jaffee and Gertler 2006). Furthermore, the conventional food system is often shrouded in labor and animal abuse violations, as well as being responsible for direct and indirect negative effects upon the health of natural resources and consumers (Lyson 2004; Guthman 2004; Magdoff and Tokar 2010; Allen 2010).

As a result of these issues, advocates for a more sustainable food system have created formal and informal collectives of individuals to challenge the conventional food system. In contrast with the vertically integrated but socially disconnected conventional system, the local food movement is composed of networks of producers, processors, distributors, retailers, consumers, educators and organizations to promote culturally appropriate, socially just, environmentally conscious, and economically viable place-based food alternatives for

communities and surrounding regions (Allen et al. 2003; Starr 2010; Haydu 2011). For example, producer/consumer links can be found in direct marketing initiatives such as farmers' markets, value-based labeling, public outreach and education, and farm-to-school programs (Hinrichs 2000; Jarosz 2000; Barham 2002; Feenstra 2002; Allen 2004; Bell 2004). These initiatives are known as agri-food initiatives (Feenstra 2002; Allen et al. 2003) and are common localization strategies supporting social change in relation to food systems. These initiatives help address the main areas of the local food movement, which is one sector of the numerous alternative agri-food movements and the focus of this dissertation.

Development of the Local Food Movement

Many of the initiatives within the local food movement stem from other areas of the alternative agri-food movement as well as social movements with similar goals. For example, there is a strong environmental component of AFMs that gained momentum in the late 1960s and early 1970s shortly after the release of Rachel Carson's *Silent Spring* marked the beginnings of the environmental movement. This began a critical analysis of social and environmental concerns about the dangers of human interaction with the environment (Mertig, Dunlap, and Morrison 2002; Hinrichs and Allen 2008). During this same time, other movements, such as the civil rights movement of the 1960s spilled over into the agricultural sectors providing support for labor movements such as the United Farm Workers (UFW) union, an organization seeking to improve migrant worker rights and safety (Allen et al. 2003). During this same time, the back-to-the-land movement, with roots in opposition to the Vietnam War, consumer culture, and increasing concern about the environment introduced a young, middle-class generation to organic farming and alternative farming practices (Allen et al. 2003; Guthman 2004). Between the 1960s and 1980s the sustainable agriculture

movement arose in response to the environmental, economic and social concerns of conventional agriculture, and gained momentum as the 1980s Farm Crisis was bankrupting farm families and surrounding communities (Hinrichs and Allen 2008; Allen 2004). Other alternative agri-food movements, such as the community food security movement arose in 1992 in response to the L.A riots revealing the insecurity of inner city food systems as many residents were left without adequate food for days afterwards (Allen 2004). Networks of organizations, such as the Community Food Security Coalition (CFSC) formed in response to these revelations. Their mission is to support a food system in which community residents can obtain a "safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice" (Maretzky and Tuckermanty 2007: 333-4).

More recently advocates in the local food movement have employed initiatives, such as 'selective patronage' campaigns aimed to increase the purchase of locally grown products (Hinrichs and Allen 2008). The Buy Local campaign started in Massachusetts by the grassroots organization, Community Involved in Sustaining Agriculture. Their message and slogan diffused across the U.S. through the collaborative network support of non-profit organizations, such as Food Routes. Today the iconic message of Buy Local is a beacon signaling to local food advocates where they can purchase local products in farmers' markets and grocery stores. The Buy Local campaign and the previous efforts of social movement advocates have successfully brought to light the importance of the health of our food system and environment. The efforts of local food advocates have helped to institutionalize the movement through the "Know your Farmer, Know your Food" initiative supported by the Obama Administration through the United States Department of Agriculture. This initiative

aims to strengthen local and regional food systems by providing a number of programs and funding opportunities for beginning farmers, organizations, researchers and others (United States Department of Agriculture 2013).

Each of the specialized areas within the local food movement utilizes social movement frames. Framing within social movements will be elaborated further in Chapter Two, but in short, a social movement frame can be understood as a 'vision for change' to alter the current institutional processes (Snow 2007). Within the AFM, there are four primary frames of interest (Stevenson et al. 2007). The first is the environmental sustainability frame, which focuses on the environmental impact of agricultural production practices, land conservation, biotechnology and more. The second frame, economic justice for farmers, focuses on the livelihood conditions of family farmers and addresses their position of inequality within the market in relation to global trade, and land tenure. The third frame, community food security, addresses food access issues in relation to the marginalized and impoverished consumers within, for example, low-income communities. This frame is indicative of the work of collaborative efforts such as the Community Food Security Coalition. The final frame of interest is related to health and food safety, which focuses on the nutritional and dietary aspects of the food system; food processing, contamination leading to food-borne illness, government policy and marketing.

These frames are also enlisted within the local food movement to challenge the conventional food system (Allen 2010; Starr 2010; Glowacki-Dudka, Murry, and Issacs 2012). Herein lays the first potential issue for alternative agri-food movement actors who are attempting to support local food; which area of interest within the food system is most important? It has been suggested that the local food movement may be suffering from an

identity crisis, not only in relation to whether we can refer to it as a social movement, but also in determining in which 'basket to place all of our eggs' when considering the most relevant movement frame (Stevenson et al. 2007; Starr 2010). Stevenson et al. (2007) argue that overcoming the barrier of establishing a common vision or frame will be necessary if any tangible change is to be realized. Perhaps one of the areas causing contention for how to frame the alternative agri-food movement (and the local food movement) is a lack of agreement in addressing sustainability, one of the main areas of interest among local food movement advocates.

Sustainability: Forming Identity and Ideals

The term sustainability or sustainable agriculture is contentious due to the varying definitions and understanding of its main components. The widespread use of the term sustainability has created confusion and can be seen as problematic when used to frame an issue that may directly run counter to a competing idea or framework (Prugh, Costanza, and Daly 2000). One example of this happening is industrial agriculture's claim to 'feeding the world' to help sustain developing countries and combat starvation (Shiva 2000). Critics of this stance have reported industrial agriculture causes more harm to global communities, economies and ecosystems rather than sustaining them (Shiva 2000; Kaimowitz and Smith 2001).

Sustainability can be understood as a model to ensure the needs of the present global population will not compromise the ability of future generations to meet their own needs (Prugh, Costanza, and Daly 2000). Many refer to the '3 legged stool' analogy when discussing sustainability (Conner 2004; Jordan and Constance 2008; Gillespie 2010). The three legs of the stool represent three primary components of sustainability: economic

viability, social equity, and environmental quality.¹ To adequately support and sustain the system the 'legs' must balance a multitude of sub-systems such as water quality, increased job opportunities, and access to healthy, affordable food. These indicators, along with others, help establish measurable benchmarks that can be analyzed over time and space, and ultimately determine the sustainability of a farm, community, and/or food system.² For a food system to be considered working toward increased sustainability, the above areas must also be addressed in relation to each area of the food chain. From each area involved in the production of food, such as the development of soil quality, managing healthy waterways, ensuring affordable seed prices, livable wages for laborers, to limiting the amount of waste removed post-consumption. In these regards and more, the social, environmental, and economic "legs" of the food system must be considered.

The term local attempts to address a number of sustainability indicators along the food chain. From ensuring food is produced and distributed in a more sustainable manner, to ensuring local, healthy food is accessible to community members, and that its waste is reincorporated back into the very same food system from which it came. "Local" also has geographical and cultural connotations as well. Kloppenburg, Hendrickson, and Stevenson (1996) discuss "local" in relation to a geographically situated "food shed", which emphasizes

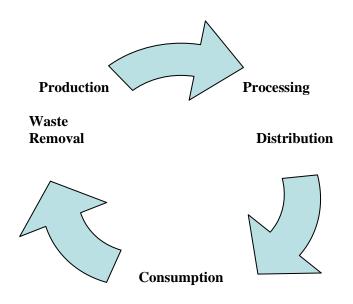
¹ These three components have also been referred to as the 'Three Es', representing environment, economics, and equity (Allen 2004; DeLind 2011)

² 'Measureable benchmarks' are quantifiable data indicators that permit measuring change over time. For instance, access to, or availability of affordable food, may be observed in a community where there is a limited number of grocery stores, food banks, farmers' markets, community gardens, etc. If this community is observed longitudinally, we will see that over a period of time this same community may increase the number of these institutions that provide affordable food. As a result, these 'bench marks' indicate that at one time the food system was less sustainable than it is at the present. In short, we may be able to observe trends occurring in this community in regards to the established indicators.

the regional production and consumption of food. Within the food sheds, a number of relationships are identified as developing trust, namely that between the consumer and the producer (Buttel 2000). The consumer provides economic support for the farmer and the farmer reciprocates by providing a product of certain quality expected by the consumer. These economic and social exchanges take place at farmers' markets, community supported agriculture programs, and more (Allen et al. 2003). These alternative initiatives have altered the linear path of the industrial food chain to one that is much more interdependent and values the reciprocal nature of the food system. The types of food produced are often seen as both culturally appropriate for the population consuming the products as well as environmentally appropriate for the region in which the food is produced. For example, Marin County has a Mediterranean climate indicative of long, dry summers and cool, rainy winters. Growing water intensive products at a large scale is not environmentally sustainable for the region. It is also financially unsustainable to pump water to irrigate a large water intensive farming operation. As a result the region has smaller scale vegetable and fruit based agriculture, and more emphasis is placed upon the grass-based agriculture and grazing advantages of dairy and beef ranching. Furthermore, "local" is readily identified with the environmental, social, and cultural aspects of a food shed or territory in which the food is produced. The quality of the environment in which the food is produced contributes to the expected value and quality of the food products, which in turn can become a cultural icon and economic boon for local food products. Labeling schemas, for example, that denote the region from which a product is produced establishes the social and environmental responsibility of that product and the region from which it came (Allen et al. 2003). Labels indicating "fair trade", "organic", "cage free", and "local" convey meaning to consumers

about a particular product. These efforts are also in place to directly counter and differentiate products from those located within the industrialized food system. In this manner, the localization of the food system is framed in such a way to support a changing perspective about the benefits of local food. Allen et al. (2003) observed the "localization" of the food system as a means for creating change. Here local food system advocates are framing resistance through alternative agri-food initiatives that directly counter and the linear and highly industrial global food system. Figure 1.2 depicts the more sustainable model of a local food system which is much more interdependent than the industrial model.

Figure 1.2: Sustainable Food System Model



As depicted above, Figure 1.2 demonstrates how the local food system is operating in a non-linear path, which by design ensures a more sustainable, and balanced system. However, identifying the necessary building blocks and measurements for a sustainable local food system may cause contention and confusion among local food advocates for the varying perspectives of what "local" means (Allen et al. 2003). Part of this contention may be rooted in the complexity of balancing the primary components of sustainability. The effort to

address just one component within the food system is a monumental undertaking, which can be more easily facilitated by forming interorganizational networks (Maretzky and Tuckermanty 2007; Stevenson et al. 2007). Furthermore, it has been suggested that for agriculture and the food systems to become more sustainable, it is necessary for organizations to network and form coalitions (Stevenson et al. 2007). According to these authors, it is necessary to form coalitions in order to increase capital resource to challenge the capital rich institutional models and practices of conventional agriculture. However, the local food movement is unable to collectively challenge the institutional models due to the absence of a shared vision among local food system actors (Stevenson et al. 2007). Social movement scholars refer to this lack of shared vision as an absence of a collective identity; the shared emotional investment and point of view with others that bond their personal identities (Melucci 1989). Collective identity in relation to social movements and organizations are analyzed more thoroughly in the next chapter, but it is necessary to make it clear that a collective identity is perhaps the primary foundation of any social movement; without collective identity, there cannot be collective action to initiate social change (Goffman 1974; Benford and Snow 2000). Actors within the local food movement have framed their missions and shaped their initiatives for achieving their individual goals for social change. However, they may not be extending this collective identity beyond their area of focus. As a result, it may be difficult for their frames to resonate with other social movement actors within the local food movement, not to mention the wider public. Stevenson et al. (2007) emphasize the need for social movement organizations to develop a master frame; a social movement frame that encompasses a variety of frames addressing the multiple components necessary for a more sustainable food system. Part of the process of developing a master frame is forming a

collective identity that resonates with multiple groups. The importance of developing collective identity is the potential advantage of tapping into the capital rich resources of a network of likeminded individuals and organizations to support the movement. Social movement research consistently shows the advantage of networks for collaboration and cooperation among organizations to promote, support, and diffuse movement frames (Snow et al. 1986; Stevenson et al. 2007; Edwards and McCarthy 2007). Organization research finds that networks are utilized to bridge and expand relationships with other likeminded individuals and organizations, which can be recognized as developing social capital (Gulati 1998; Phillips 1991; Inkpen and Tsang 2005). Social capital theory will be expounded upon further in Chapter 2, but as a brief introduction, social capital can be understood as trusting relationships between organizations and/or individuals that enable the cultivation and utilization of tangible and intangible resources by network members (Coleman 1988; Portes 1998; Putman 2000). For example, Inkpen and Tsang (2005) focus on collaborations or strategic alliances utilizing social capital as a means for successfully transferring knowledge via network channels among organizations.³ Similarly, there is evidence of social capital among organizations in the local food movement helping establish alternative marketing outlets and other practices such as farmers' markets, community gardens, community supported agriculture, and more (Flora 2009). However, to establish and sustain relationships that may benefit individuals and community members requires trust, the foundation of social capital. Research among for-profit interorganizational networks found that when trust is low

³ Strategic alliances at the interorganizational level can be defined as a group of organizations entering into voluntary relations involving the exchange and sharing of resources for the purpose of the co-development of products, technologies, and/or services (Gulati 1998).

the likelihood of working together will diminish (Das and Teng 2001). Social movement researchers have not spent a lot of time examining trust within social movements (Goodwin, Jasper and Polletta 2007). However, there is evidence that trust among groups may be limited if another group's messages are perceived as untrustworthy (Vago 2004). This may be evident when there are competing subgroups working within a movement, and there are disagreements for how to best address creating social change (Benford 1993). Other researchers have found that trust can manifest among groups through an individual leader who emphasizes his or her commonalities as aligned and shared among their constituents (Goodwin et al. 2007).

Consequently, developing a level of trust to ensure everyone is committed to the movement's goals and means is necessary. When these functions are fulfilled effectively, relationships built on trust allow for a "Shortcut through which we can avoid processing a lot of information for ourselves. (Goodwin et al. 2007:419). In short, we trust others to provide us with the information, services, and more that we would otherwise be unable to attain due to a combination of capital deficiencies, such as time, money, education, and more. As a result, we often supplement these scarce resources by developing relationships with others in order that they will deliver the desired information. In short, we trust they will provide us with whatever it is we are seeking, yet do not have the resources to attain it ourselves by other means.

Furthermore, missions and resources of social movement organizations may be enhanced when outside actors provide new information that can contribute to movement goals (Soule 2007). Social movement researchers have referred to this process as taking advantage of the indirect ties, whereas social capital literature labels it bridging social capital

(Soule 2007; Putnam 2000). As a result, establishing trusting relations among organizations by casting a wider net to collaborate and capture new ideas beyond the primary network allows organizations to consider adopting alternative methods to accomplish goals more efficiently. However, there are drawbacks of social capital that limits the expansion of trusting relations beyond one's immediate network, which may pose as barriers for collaborative efforts (Portes 1998; Putnam 2000). For example, networks exhibiting bonding social capital may limit new membership and thus new ideas that may enhance their organization's goals from being realized. The limitations of social capital will be discussed in more detail in Chapter 2.

In regards to the support and sustainability of a local food system, research has identified that social capital may benefit and limit community efforts (Flora 2009; Glowacki-Dudka et al. 2012). However, what is not completely clear is how social capital can affect the effort among social movement organizations working within the local food movement to realize a more sustainable food system. The aim of this research is to determine how social capital may enhance the ability of organizations in Marin County to work together collaboratively, or deter them from developing collaborative networks that could support a more sustainable local food system.

Marin County, California

Marin County, California is the site of this research, and is located north of San Francisco County and is part of the greater San Francisco Bay Area (Map 1.1). Historically an agricultural county specializing in beef ranching, dairy, and aquaculture, Marin County is home to a large number of public and private organizations interested in increasing the sustainability of the food system. The missions of these organizations are to preserve and

enhance the sustainability of Marin's rich agricultural history, natural environment and communities. These organizations have aided farmers and ranchers in conserving farmland, established marketing outlets, developed branding and marketing schemes for the promotion of organic food, provided resources for producers to improve operation management, as well as offered public outreach and education strategies to bolster Marin County agriculture. Other organizations have been actively working in related areas to curb hunger, childhood obesity, and develop urban farming operations for community members in various parts of the county. For example, some organizations have started community and school gardens to encourage children and others to grow their own food, and incorporate healthy ingredients into their diets. Many of these gardens also direct their surplus produce to local food banks and shelters to feed the homeless and low-income community members with limited access to food.

Many of these organizations share a long history of collaboration to support a more sustainable local food system. A number of these organizations worked in conjunction with the county's community development agency to develop Marin County's 2007 Countywide Plan. The plan addresses long range planning goals for the county, including ways to increase the sustainability of the county's food system through the promotion food policy initiatives (Marin County Community Development Agency 2007).



Figure 1.3: Map of Marin County

The source of this collaborative energy was derived from a handful of organizations and individuals who originally started the Marin County Food Policy Council in 1998, one of the nation's first policy councils aimed at increasing the sustainability of a local food system. The Food Policy Council thrived for a number of years until it disbanded in 2006, only to be reformed in the summer of 2012. Today, the Food Policy Council is continuing the work of its predecessors by addressing issues of sustainability in the local food system (UCCE 2013).

Despite the progress made by some of the organizations in Marin, there are still a number of organizations with vested interest in promoting the environmental, social, and economic sustainability of Marin that are not linked to one another. As a result these organizations are not actively taking advantage of potential collaborative opportunities for

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increasing the sustainability of the local food system. Research on organizations in both the private and the non-profit sectors details the value of organizations networking together to realize end goals (Inkpen and Tsang 2005; Gulati 1998). For example, interorganizational networks facilitate the diffusion of innovative ideas, which can increase profit margins for partnering organizations (Ahuja 2000). Similarly, networks of social movement organizations share tactical information, innovative ideas, and other resources to support social change (Diani 1997; Andrews and Biggs 2006; Diani 2007; Earl 2007; Soule 2007). If there is an advantage to collaboration, why do some organizations work together collaboratively, while others do not? The answer stems from the mission, organizational capacity, and trust among network actors. These factors will help aid the building of collective identity-the shared sense of "we-ness" which bonds and motivates individuals around a collective interest(s) (Snow 2001). Organizational research in the for-profit sector has demonstrated that trust enables the formation and maintenance of interorganizational collaboration (Ahuja 2000; Das and Teng 2001; Bachman 2001). On the other hand, social movement research has demonstrated that a lack of a shared vision (collective identity) will reduce collective action to support movement goals (Goodwin et al. 2007). Current research in the local food movement has demonstrated that a lack of social capital and subsequent trust may result in divided goals and perceptions of production practices among a sample of Midwestern farmers in the local food system (Glowacki-Dudka et al. 2012). Similarly, a cooperative of businesses and non-profits working together in the northeastern U.S. fruit industry were unable to successfully utilize social capital effectively due to a number of issues, including a lack of agreement on cooperative philosophy and goals (Hilchey, Gillespie, and Henehan 2006). However, there is still a lack of understanding of whether or

not social capital and the perception of trust, for example, will have an effect upon social movement organizations within the local food movement. Will these findings hold true for non-profits working in the local food movement, and in what ways might they differ?

There is value in examining organizational leaders' social capital to help determine its relationship with the effectiveness of organizations (their organization and others) in their network. These perspectives may differ greatly from what we have learned from previous scholars in both the private and public sectors who have analyzed social capital as a network asset in social movements. Knowing the diversity of interests in the local food movement, it is important to examine the challenges and accomplishments of the actors who are able to successfully build collaborative relationships with other organizations. Findings from this research are intended to build upon current knowledge about the dynamics of organizational networks working within the local food movement. Furthermore, this knowledge will advance the understanding of how social capital theory can be utilized to assist social movement research in the local food movement and the supporting network of organizations to more effectively realize their goals and identify barriers. The advantage of developing trust-social capital-may not be apparent to some organizational leaders. Do ideological differences in relation to the organizational interests and interpretation of sustainability affect the level of trust and ability of organizations to network and collaborate to support the local food system? In sum, how can social capital explain the variation in collaboration among network organizations? Determining how social capital affects the ability of a collaborative network to form among organizational leaders and other key personnel to support a more sustainable local food system is the main interest of this dissertation. In sum, this research aims to address the following question: How does social capital affect the

interorganizational dynamics for establishing a collective identity to support the local food movement? The next chapter will introduce the concept of social movements and address how organizations have played key roles in supporting social movement goals. I will then elaborate social capital theory as it relates to social movements and specifically to local food systems.

CHAPTER 2: SOCIAL CAPITAL AND SOCIAL MOVEMENTS

Social Movements

In Chapter 1, I defined social movement as collectivities of people and their organizations working together to achieve social change (Olson 1965; Snow et al. 2007; McAdam and Snow 2010). Social movement actors (people and organizations) address social problems by voicing their grievances and/or concerns by engaging in collective action in order to change the social structure of society (McCarthy and Zald 1977; Snow et al. 2007). Collective action in its most basic form is the goal-oriented activity of two or more individuals (Snow et al. 2007). The collective efforts often take place in public, institutional spaces and can vary from the humdrum which does not garner much attention to the dramatic such as public protests (Tarrow 1998; Snow et al. 2007). Collective action does not simply materialize by itself, but is preceded by the formation of collective identity, the "we-ness" referenced to in the previous chapter. Collective identity can be understood as one's "cognitive, moral, and emotional connection with a broader community, category, practice, or institution" (Polletta and Jasper 2001:285). The authors continue with their examination of collective identity emphasizing the connection or perception of a shared status or relation in conjunction with cultural materials, such as "names, narratives, symbols, verbal styles, rituals, clothing", and more (Polletta and Jasper 2001:285). To draw upon historical accounts of collective identity, Buechler (2011) uses the example of worker's rights during the Industrial Revolution as observed by Karl Marx. With the rising awareness of the working class' exploitation by the capitalist elite, laborers became aware of their social position in a socially, economically, and culturally segregated society. With the development of class

consciousness—the collective identity of the workers—the stage was set for challenging inequality for change.

Perhaps one of the most effective methods for organizing collective action to support change is through social movement organizations. A social movement organization is a formal organization that identifies its goals with a preference for a particular social movement, and attempts to pursue, support, and/or implement one or more of the movement's goals (McCarthy and Zald 1977). Social movement organizations, like all formal organizations, are identified by a structure with by-laws, mission statements, strategic plans, and personnel that direct these organizations to realize collective goals (Hall 1996; Edwards and McCarthy 2007). Other characteristics of formal organizations include established boundaries that distinguish their area of specialization or focus from that of another organization(s) and immortality, that is, members come and go, but the organization endures (Hall 1996). The utility of social movement organizations is well documented in social movement literature, primarily among resource mobilization theorists, who see organizations as the means for recruiting constituents, and coordinating and facilitating social movements (Phillips 1991). Organizations also provide the capital resources, such as human, financial, and physical capital, to support movement actors in achieving their collective action goals (Edwards and McCarthy 2007).

As discussed in Chapter 1, alternative agri-food movement literature details the key functions of social movement organizations within the local food movement (Allen et al. 2003). For example, organizations have helped farmers and communities to develop alternative agri-food initiatives to bolster sustainable local food systems through farmers markets, community supported agriculture, land conservation, local food access for low-

income populations, and increased sustainability in agriculture in general (Starr 2010; Haydu 2011; Allen 2010; Flora 2009; Hinrichs and Allen 2008; Guthman 2008; Barham 2006; Allen 2004; Bell 2004; Allen et al. 2003). These organizations are similar in both design and mission to other social movement organizations; they are formal organizations with the intent to counter the detrimental effects of the industrial food system. However, the difference between some of the alternative food movement initiatives promoted by social movement organizations is that many are simply providing an alternative. In short, the highly industrialized, conventional food system is challenged by the multiple efforts in the form of alternative production practices, processing, marketing and more (Allen et al. 2003). One of the areas of interest pertaining to social movement organizations working within the local food movement is how these organizations are in need of developing a collective identity to develop collective action frames for change. The next section discusses developing collective action frames and the importance for realizing movement goals.

Framing

1.

For organizations to develop and maintain any type of collective action, they must have support from their constituents (activists, volunteers, and staff), community members and foundations to maintain their internal structure, outreach efforts and to develop roles, rules, and frames (Benford and Snow 2000). To initiate and maintain support, organizational leaders and key personnel must construct collective action frames. Here, 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 are often referred to as agri-food initiatives as discussed in Chapter

The application of collective action frames as they relate to social movements is attributed to the work of Goffman (1974). For Goffman, frames are a means by which individuals are able to comprehend, identify, and label their social milieu and the world in general. In short, frames bring meaning to occurrences and events, which can therefore provide a means to organize experiences and direct action (Benford and Snow 2000). Similarly, collective action frames attempt to develop and subsequently build upon the collective identity of the constituents and potential adherents (individuals and groups not currently active in the movement or organization but sharing grievances). They must be designed in such a way as to strategically gain movement support by disseminating information to recruit new members into the movement. The recruitment of new members is reliant upon the current movement actors successfully presenting movement goals that resonate with potential adherents' lives and personal grievances. In short, collective identity is a key component in any social movement for it is the ability to cohere individuals and groups to create a shared identity (Melucci 1989). Collective identity can be constructed in a number of ways. Gerson and Preiss (1985) proposed three methods for interpreting collective identity construction: boundaries, consciousness, and negotiation. Beginning with *boundaries*, individuals and their groups establish social territories of group behavior that differentiate them from "the other", based upon moral, cognitive, behavioral, and other differences (Gerson and Peiss 1985). Boundaries can also exist among social movement organizations as they differentiate themselves from each other based upon the varying grievances they have with "the other". Collective identity is therefore just as diverse as the movement, and individuals will more readily align themselves and adhere to the boundaries established by the organization and its leaders (Hunt and Benford 2007). The boundaries

outlined here at both the individual and organizational levels align with collective identity as described by Polletta and Jasper (2001). Here the boundaries are the cognitive, moral and emotional connections of an individual their organization with the broader community and the food system. Each organization, however, will have its own identity depending upon shared grievance within the food system.

The second analytical tool proposed by Gerson and Preiss (1985) refers to consciousness. The consciousness or awareness of individuals to support a social movement is built and reinforced through their interaction with existing members, as well as their interaction with "the other" or antagonists; those opposed to the movement. Consciousness, like established boundaries among social movement organizations, can also be divisive within a social movement (Hunt and Benford 2007). Depending upon how group consciousness and subsequent collective identity is constructed, other groups and their collective action frames may not resonate well with other groups, and may even run counter to others' frames. For example the types of framing processes used by each group are often distinctive to the area of interest and, therefore, the importance of one area of the movement may overshadow other areas that are equally important for the movement to succeed. To contextualize consciousness for analyzing collective identity in this research, I want to revisit the multi-faceted alternative agri-food movement as a whole. Within the movement there are numerous actors and social movement organizations working toward addressing grievances with the industrial agriculture model. As a result each of the organizations working within the alternative agri-food movement have their boundaries, but they may not be conscious of the outside forces, such as the conventional food system, that challenges the multiple areas of interest needed for increasing the sustainability of the local food system. Without dialogue

among organizations and their constituents acting within the local food system to challenge the conventional model, there is little opportunity to share grievances and develop a consciousness or awareness of the broad boundaries defining the agri-food movement as a whole.

The final area of analyzing the construction of collective identity is *negotiation* (Gerson and Peiss 1985). Negotiation can be understood as "the symbols and everyday actions subordinate groups use to resist and restructure existing systems of domination" (p. 111). Collective identity and subsequent collective action are constantly adjusting to changes in the movement, reacting and changing based upon interactions with antagonists, as well as with other constituents. The collective identity is thus shaped and reshaped as individuals and their groups negotiate the social movement landscape through their shared experiences and interpretations of their opportunities for creating change (Melucci 1989). Other social movement scholars have identified forms of negotiation as an indicator of collective identity. Soule (2007) recognized the diffusion and adoption of tactics via indirect ties of homophilous movement actors. Tactics are adopted by social movement actors, groups and organizations sharing similar grievances toward a dominant group. Due to necessity, these tactics are reconfigured upon repeated negotiation with the current actions of the dominant group; as the dominant group changes, movement actors will alter their strategies to counter these changes. In relation to the local food movement, negotiation is an ongoing process. Identifying a collective identity among actors within the movement would require determining which grievance movement actors are most readily addressing within the food system. Identifying these actors and how they share information, and social movement tactics—such as

alternative agri-food initiatives—and ultimately align strategies to counter the industrial food system, would allow for increased understanding of the presence of a collective identity.

Collective identity can be transmitted between individuals as well as through social movement organizations by personal and interorganizational networks. Social movement organizations, for example, will recruit others via interpersonal and extended network ties that have similar historical experiences, such as the shared experience of victims of racial oppression prior to and during the civil rights movement (McAdam and Paulsen 2010). The shared experiences and collective identity among African-Americans facilitated the recruitment and the subsequent collective action to challenge the prevailing racially segregated U.S. political and social structure. Recruitment is commonly facilitated by an established core group of leaders (the faces of the movement) and well-defined frames, the latter signifying frames that clearly outline the grievances that resonate with networks both within and outside of the movement (Benford and Snow 2000; Morris and Staggenborg 2007). For the civil rights movement, Dr. Martin Luther King, Jr. was the charismatic leader who aided the framing of the civil rights movement, creating meaning, and a collective identity around what it meant to be a part of the civil rights movement--resistance through non-violence.

Caesar Chavez and Dolores Huerta, co-founders of The National Farm Workers Association (later renamed United Farm Workers) learned from Dr. King's framework of nonviolence, and successfully supported and led a movement in California to oppose social and environmental inequality around farm practices. Much like the frames that resonated with others engaged in the civil rights movement around the country, these frames also aimed

to mobilize collective action to oppose and ultimately replace the prevailing institutional ideology and practices (Givan et al. 2010).

As mentioned earlier, collective identity may differ depending upon the organization and how the movement is framed (Gerson and Peiss 1985). This was especially true for the civil rights movement. The construction of collective identity was necessary to support the collective action for change. Involvement in the civil rights movement was risky behavior and for those who did not share the collective identity through shared experiences with African-Americans, such as Anglo-Americans, the recruitment and formation of collective identity was developed through their networks. McAdam (1986) suggested that recruitment into the civil rights movement project Freedom Summer, which found many whites traveling to southern states to gain black participation in politics was highly dependent upon three factors: the number of organizations an individual belongs to, with primary importance being political organizations; the amount of previous collective action experiences; and the links to other people also involved in the campaign.

One of the reasons the civil rights movement was successful was due to the ability of its leaders and networks of organizations to frame the movement in a way that resonated with not only African-Americans, but with many Americans. Leaders were able to develop what is called a master frame, which captures the mission and goals of a movement, while including perspectives from a variety of social movement organizations and individuals. As a result, master frames have an opportunity to resonate with a greater number of individuals and mobilize collective action (Snow 2007).

Frame Support and Mobilizing Resources for Collective Action

The potential effectiveness of any social movement organization in building collective identity and subsequent collective action is greatly dependent upon its ability to access and distribute resources to its constituents (Oliver and Marwell 1988; Cress and Snow 1996; Edwards and McCarthy 2007). The most important resources for social movement organizations to achieve their goals consist of financial, physical, human, and social capital (Cress and Snow 1996; Goodwin et al. 2007). Financial and physical capitals are necessary to facilitate the operations of social movement organizations by providing office space, equipment, supplies, and salaries for employees. Human capital is the education, experience, expertise, and commitment of employees and volunteers of a social movement organization. Without financial and physical resources, it is difficult to recruit and support human capital. Likewise, without dedicated and capable human capital, it is impossible to acquire material resources. Social capital, in the form of trusting relationships, helps mitigate some of the risk inherent in forming interorganizational networks, especially when the institutionalized sanctions against breaching of trust are not present (Goodwin et al. 2007). Furthermore, it is important to understand that when social movement organizations gain material resources, such as foundational grants, they are not only provided with the financial means to maintain operations and help their target populations accomplish their goals, but they are also gaining intangible resources, such as legitimacy (Cress and Snow 1996; Edwards and McCarthy 2007; Scott 2009). In organizational literature, legitimacy helps manage the impression that the organization is able to fulfill its goals through means that are accepted and promoted by credible institutions and/or authorities. Furthermore, perceiving an organization as legitimate

may often stem from the cultural values of the society in which the organization is located (Parsons 1960; Scott 2009).

From a social movement perspective, legitimacy is determined by the extent to which an organization's message and the actions of its leaders and constituents resonate with others (Melucci 1996; Goodwin et al. 2007). The role of legitimacy is multifaceted, serving as a tool for recruitment, maintenance of current members, as well as enabling the messages and goals of the organization to become more widely accepted or institutionalized. One of the benchmarks of a successful social movement is the institutionalization of the movement's goals (Vago 2004). This is not possible unless the movement is framed in a manner where the grievances of the movement resonate with constituents and are therefore seen as necessary to be addressed at the macro level (regionally, nationally, and perhaps globally). If the practices and methods for achieving movement goals enacted by movement leaders and their organizations are not similar to the current institutional standards for achieving goals, the movement may not be considered legitimate by the public (Edwards and McCarthy 2007). In short, the more leaders are able to frame their movement goals as obtainable through legitimate means, such as advocating for change by working within the current institutionalized social structure, the more constituents, adherents, and others will trust and support the goals of the movement (Edwards and McCarthy 2007).

Legitimacy of movement goals may also be determined by the size of the organization such as the amount of financial and human capital resources available to the organization (Minkhoff 1999). Additionally, the ability of organizations to promote change is related to their historical embeddedness within a movement—are they considered leaders within the given movement? If so, the organization and its message will be more legitimate

than another organization that has invested less time in the movement (Edwards and McCarthy 2007). The number of years active as an organization offer advantages to obtaining additional key resources, such as financial and human capital. For younger and less established organizations this may create challenges to gain needed resources due to the lack of awareness of their presence within the community.

One way for newer, less established organizations to gain access to legitimacy and resources is to form coalitions (Cook, Cheshire, and Gerbasi 2006). In this way, organizations can share scarce resources thus increase their likelihood for mobilizing action. Edwards and McCarthy (2007) noted that it was the ability of an organized collective of organizations to pool financial resources during the farm worker's rights movement in the late 1960s that enabled a relatively financially limited movement to gain legitimacy to create change. By collaborating with each other they were able to acquire and distribute more resources among collaborative members to address resource scarcity and thus overcome a power balance deficiency in relation to counter movement organizations with more resources.⁴ As a result, mobilizing resources increases the likelihood of prolonging effective collective action (Edwards and McCarthy 2007). Furthermore, research on non-profit organizations indicates that funding agencies are more inclined to fund projects where collaboration is present, suggesting the pooling of resources will provide more legitimate means for achieving project goals (Johnson, Honnold, and Stevens 2010).

This leads us to the question: If collaborative relations are indeed beneficial for realizing goals among network members, why are some organizations still unwilling to form

⁴ Counter movement organizations can be understood as organizations that seek to maintain the status quo of institutional practices by challenging other social movement actors seeking to change institutional behavior.

alliances to achieve goals? The collaboration does not happen overnight, and the benefits of resource sharing may be offset by the costs involved and the risks of opportunism by other parties. Sharma and Kearins (2011) noted a number of barriers for collaboration for nonprofit organizations working toward sustainability. Some of the costs for collaboration were related to resources, such as funding, as well as disagreement about the conceptualization of sustainability and how to align the varying points of views to address it. Others have noted similar barriers of collaboration relating to social control and trust (Bachman 2001). A major deterrent is the fear of contributing more to the arrangement than other partners while they get equivalent benefits, or even find their organizations at a disadvantage because a collaborator used the shared resources to their unilateral advantage. These costs of collaboration coincide with the issue of what social movement scholars have perceived as frame disputes. Frame disputes are intra-movement framing disagreements about the intended outcomes and established goals for the movement (Benford and Snow 2000). Disagreements about goals and means among social movement organizations can discourage collective action, which points to the need for building a consensus around a shared frame and collective identity within the movement (Stevenson et al. 2007). The framing process is a deliberate procedure designed to gather these ideas and determine the best means possible for achieving social change. These frames must also resonate with constituents and others to ensure continual recruitment, and support of movement goals. If the framing message does not resonate in a manner through which recruitment and support is achieved, this will also result in framing disputes (Benford and Snow 2000). Thus, the frames chosen by organizations must be crafted in such a way that they resonate better than others, which will

ultimately help determine perceived legitimacy and support for the movement and its organizations.

Interorganizational Networks

Social movement organizations have benefited from borrowing ideas from other likeminded organizations to support collective action. Diffusing and adopting tactics, frames, and innovative ideas is strategically used by organizations to mobilize resources and ultimately increase the likelihood for achieving social movement goals. Givan et al. (2010) state, "One cannot understand social movements-how they evolve, how they expand, how they engage the political arena—without understanding the dynamics of diffusion" (p,1). Diffusion refers to the sharing and adoption of ideas, practices, schemas, strategies, technology, and more between and among actors (Strang and Meyer 1993; Rogers 2003; Soule 2007). Rogers (2003) defines diffusion as the "process by which (1) an *innovation* (2) is communicated through certain channels (3) over time (4) among the members of a social system" (p. 11). Rogers defines an innovation as "...an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers 2003:12).⁵ Typically an innovative practice will be adopted if it meets certain characteristics (Soule 2007). It must offer a relative advantage over the current ideas or product in use, and ultimately contribute to a recombination of ideas to alter, for example, collective action frames among groups and organizations (Soule 2007). The altering of a frame and subsequent action will differ amongst organizations and their aim; they will take the most relevant ideas and strategies from one organization and movement and alter the strategies to fit with their framework.

⁵ For the purpose of this research, I will use the term "practice(s)" and "innovations" interchangeably. I will also use the term "innovative practices", to help describe the practices utilized by organizations that are intended to facilitate social change within the local food system.

Diffusion can occur through direct network ties in which actors are in dense, oftentimes geographically proximal space with frequent contact, interaction, and communication (Soule 2007). Therefore, with increased contact among multiple homophilous organizational personnel within a region, there is better opportunity for diffusion of ideas to occur. As a result, we find these directly tied, dense networks are also able to mobilize collective action more readily due to their shared proximity and frames (Diani 2007).

Diffusion via indirect network ties is also representative of network actors that also share a collective identity based on social or cultural experiences, struggles, and/or philosophies (Soule 2007). Indirect ties in social movement theory represent the learning of and adoption of practices of others through a variety of channels, such as the media (Soule 2007). Adopting movement frames and strategies for collective action are facilitated by collective identity shared among adopter groups who view other movements as aligning with their own. Social movement research has documented the relevance of direct and indirect diffusion, such as in the civil rights movement (Givan et al 2010). The collective identity of African Americans as victims of an oppressive government was similar to that of the oppressive nature of English colonial rule in India (Chabot 2010). The advent of the internet and other channels of diffusion that are readily available today were absent in the mid-20th century. Despite the lack of efficient communication channels of the 21st century, the innovative tactics of nonviolent protest were diffused from India into African American organizational networks, including churches and academic institutions, by direct ties with Gandhi via personal visits with civil rights leaders. Furthermore, the media also facilitated indirect ties for the diffusion of non-violent protest into the civil rights movement with wide coverage of Gandhi through printed material, for example *Time* (Chabot 2010). Today,

indirect ties may be facilitated via sources such as the media (newspapers, television, internet) or social networking and special interest websites. These indirect ties allow actors to learn from one another's tactics and repertoires (Soule 2007), which can directly contribute to frame development, which favors and incorporates any recombination of the observed tactics to suit the needs of movement actors.

Diffusion through indirect ties within the local food movement is exemplified in the selective patronage campaign strategy with the slogan "Buy Local" developed by the organization. Food Routes Network.⁶ With the help of social media and special interest websites, the Buy Local slogan spread across the U.S. (Hinrichs and Allen 2008). Food Routes Network has been successful in tapping the interests of a variety of individuals and groups, capturing a collective identity that aligns with their local food movement frame. Their success can be attributed to their ability to network and effectively diffuse their frame for addressing the institutional food system through alternative measures of purchasing food. Their framing of the local food movement resonates well with multiple stakeholders by how they have "packaged" the messages. Their mission on their website (foodroutes.org) outlines their areas of interest as reintroducing people to the way their food is grown, by whom, and the distribution of that food. The combination of frames used in this instance can be understood as a master frame: "a unifying message bringing together various sub-issues, organizations, and networks within a social movement" (Stevenson et al. 2007:37). Food Routes' master frame was successful in mobilizing the collective action of numerous

⁶ Food Routes Network "provides communications tools, technical support, networking and information resources to organizations nationwide that are working to rebuild local, community-based food systems. FRN is dedicated to reintroducing Americans to their food – the seeds it grows from, the farmers who produce it, and the routes that carry it from the fields to their tables" (Foodroutes.org).

consumers, farmers, and organizations to support their message. For the local food movement to continue to make strides such as these, developing a master frame to encompass the multiple frames within the larger alternative agri-food movement will be a necessity. For master frames to develop via organizations, the existing and potential interorganizational relationships in Marin must be examined to determine the factors that enable organizations to work together. To aid this analysis, bridging and bonding social capital will be elaborated upon in the next section to help establish the foundation for determining the potential role social capital has in determining master frames and subsequent collective action among organizations.

Social Capital

Social capital research in social movements has been given little attention. Perhaps one of the main reasons for the lack of use is the difficulty in quantifying social capital and the absence of a common definition (see Portes 1998 for a review). In this dissertation, social capital is defined as relationships characterized by trust and norms of reciprocity, which can be used to realize collective as well as individual goals (Putnam 1993; 2000; Putnam and Feldstein 2003). Putnam states that the core idea of social capital is, "social networks have value" (p. 19). The value Putnam describes is the shared resources and ideas that can be utilized for mutual benefit. Putnam (2000) illustrates the value of social capital by referring to the civil rights movement and the United Farm Workers Movement. Here the social movement frames and successful peaceful protest tactics used in the civil rights movement were readily adopted and transferred through trusting networks.⁷ He states, "[s]ocial movements and social capital are so closely connected that it is sometimes hard to see which

⁷ For a detailed history of the United Farmworkers Movement and its ties to the civil rights movement, visit: www.ufw.org.

is chicken and which is egg. Social networks are the quintessential resource of movement organizers" (Putnam 2000:152).

Social capital has also been used to explain economic activity. Burt (2001a) found social capital as serving individual interests describing it as a "metaphor about advantage" where society is viewed as a market enabling goods and ideas to be exchanged in pursuit of the interests of people. For example, two individuals may trust one another to exchange useful information to support their business operations. Trust and norms of reciprocity, components of social capital, will allow these same individuals to lend financial capital to one another. In this example, social capital can be seen as a type of credit system. Putnam (2000) adds that social capital is not merely a privately held good by an individual, but also a public good. An example of this can be seen in neighborhood watches; community members watching over their neighbors' homes may benefit the community as a whole because crime may go down in general. Here social capital is embedded within the network of members of the community where people can trust others to stand watch over their homes, while this same act can be entrusted with others to be reciprocated in the future. Thus a stronger, more cohesive bond may be formed within the community.

Coleman (1988) presents a couple of aspects of social capital that are indicative of relationships among individuals and groups: obligations and expectations and information channels. Obligations and expectations develop a reciprocal relationship among individuals and groups as individuals in a network exchange resources. "If A does something for B and trusts B to reciprocate in the future, this establishes an expectation in A and an obligation on the part of B" (Coleman 1988:102). Obligations can thus be understood as a form of credit that can be accrued and actor A can "call in the credit" at a time when needed. The obligation

for "B" to return a favor or some other service to "A" is expected, which is understood as the norm of reciprocity (Putnam 2000). The obligation to reciprocate between two or more actors is reinforced especially when the actors are located within a dense network—where ties among individuals regularly overlap through mutual, shared relationships. Social capital also facilitates the development and maintenance of information channels, which allow individuals and groups to share resources that may benefit the actors in the network (Coleman 1988; Lin 2001). Through networks of trusted individuals or organizations, information about local events, current affairs, new areas of research and more can be exchanged. Maintaining these connections with others who are 'in the know' keeps an individual informed about subjects they would otherwise not pursue because they do not necessarily want to look for the information through other channels, for example newspapers or other forms of media. In short, information networks and the advantages of these communication networks are both evidence of existing social capital because they are often an outcome of social capital. Access to information facilitates action toward organizational and individual goal achievement (Coleman 1988).

<u>Trust</u>

A critical aspect of social capital is the trusting nature of the relationships involved (Coleman 1988; Portes 1998; Putnam 2000). In some research, the term trust is used as a proxy for social capital. For example, social capital and trust in the local food movement is described by Jarosz (2000) who argues that the ability for a local food system to thrive is dependent upon the cooperative and trusting relationships established among the various stakeholders. Glowacki-Dudka et al. (2012) also observed evidence of social capital in the trusting relationships among a network of stakeholders involved in the production,

distribution, marketing, and promotion of local food. However, social capital waned among stakeholders due to growing differences in production practices and goals. They recognize the challenge for future researchers of social capital and local food systems to determine the ways in which the members of local food systems develop social capital through their coalitions, and how trusting partnerships are developed to realize goals and organize initiatives that benefit themselves and their communities. The development of any trusting relationship will greatly depend upon the level of risk involved for the individuals and groups working together. Das and Teng (2001) find strategic alliances among business firms are more likely to thrive, when the risk of unsatisfactory performance and opportunistic behavior is low. Opportunistic behavior involves taking advantage of the relationship for one-sided gain. Much of this opportunistic behavior is the result of organizations pursuing their own interests, which may not be congruent with the interests of the alliance. Social movement scholars discuss the role and importance of trust in the development of collective identity for collective action to occur (Goodwin et al. 2007). Trust is key to whether constituents will concur with the proposed framing by movement leaders. The more trust among the leader and the constituents, the more likely the latter will concur with their framing of the movement. Similarly, non-network members will more likely accept the frames of the social movement if they trust the ability of those tactics to be successful (Morris and Staggenborg 2007). When constituents are not aligned with the framers (leaders), frame disputes will result, signaling waning trust in framers' abilities. When framers possess more human capital, such as education and skill sets relevant to the movement, however, frame building can be more easily facilitated due to increased perception among constituents about the legitimacy of frame builders' ability to lead (Oliver and Marwell 1992; Morris and

Staggenborg 2007). The perception of legitimacy may be an indicator of trust within a network that may result in a master frame for enacting collective action among all network members.

Trust has not been explicitly discussed, however, in relation to the role of framing and whether or not frame disputes may deter interorganizational collaborations. Stevenson et al. (2007) purport that a master frame is lacking among social movement organizations within the alternative agri-food movement and their constituents. In the case of the alternative agri-food movement and their constituents. In the case of the alternative agri-food movement, which includes the local food movement, there are numerous areas of interest that have similar motives–challenging the conventional food system model. Organizations are not actively aligning these interests in their framing methods for addressing those grievances to collectively act together to change the conventional food system. Without a master frame, it may be difficult to unify constituents, as well as successfully recruit potential adherents to invest their personal resources in becoming more active in the movement. But creating a master frame is not an easy task when considering the multiple areas of interest within the local food movement. If organizational leaders are invested in their own frame building, can they trust other organizational leaders to have similar goals, as well as have similar means for achieving those goals?

In the for-profit sector, Das and Teng (2001) discuss two dimensions of trust found in interorganizational collaboration: good will trust and competence trust. The latter can be understood as trusting another to have the ability and expertise to ensure a successful outcome (Barber 1983; Mayer, Davis and Shoorman 1995). Good will trust is conceptualized as perceiving another as willing to aid in the shared interest among partner members and not take advantage of partner members in an opportunistic fashion (Mayer et al. 1995). Fulmer

and Gelfand (2012) provide an extensive review of trust in the for-profit sector and support these findings, adding that trust among for-profit organizations will be enhanced by shared organizational missions, leadership behavior, and prior collaboration. In short, the above dynamics of trust are necessary for reducing risk, while increasing overall trust between two or more organizations. It is likely that the same components of trust evident in for-profit coalitions will also apply in social movement networks.

Thus far, local food movement literature has not explicitly detailed how trust affects collaboration among organizations. There may be other sources of mistrust that are not considered, such as how an organization frames the concept of a local food system and its various components. Social movement literature has identified the importance of framing a social movement and how this develops and supports collective identity (Taylor and Whittier 1992; Benford and Snow 2000). The development of a collective identity also involves building trusting relationships. The trustworthiness of a group is maintained partly by the presence of normative behavior. In social capital literature, expected behavior and sanctions facilitate trust by limiting the negative effects (risks) of human interaction while encouraging the positive effects (Coleman 1988). If there is mistrust among organizations in relation to the legitimacy of the framework of other organizations, there may be a perceived risk in partnering with others. Mistrust may therefore deter the development of key networks for collaboration. In social movements, organizations rely upon their trusted networks to ensure the framing of the movement is able to resonate with both constituents as well as the wider public (Benford and Snow 2000). If the frames of one organization do not mesh well with others, organizational leaders may see any future interaction with those organizations as a risk. As a result, the densely bonding social capital may persist, which will limit

opportunities for gaining new ideas from those organizations outside of the network (Portes 1998). Although dense, tightly linked networks are more likely to harbor trusting relationships due to a combination of factors, such as homophilous individuals with increased sanctioning potential, there are advantages for venturing outside of the network (Coleman 1988; Rowly 1997). Venturing into outside networks where actors' network ties are weaker in comparison to their dense, tightly linked networks can provide strategic advantages for doing so (Granovetter 1973; Putnam 2000; Burt 2001b). The significance of network dynamics in social capital is elaborated upon in the following section.

Bonding and Bridging Social Capital

Social capital and network theorists often discuss the structure of networks in relation to the embedded values and potential opportunities for adding value to a network (Granovetter 1973; Putnam 2000; Burt 2001b; Lin 2001). Bonding social capital is characterized by strong ties, which are often emotionally intense, homophilous, exchange relationships within a group, for example groups base upon kinship, class, and race (Degenne and Forse 1999). Networks exhibiting bonding social capital are often closed, where individuals and organizations have strong ties to all other actors within the group (Putnam 2000). There are advantages and limitations to bonding social capital. Some advantages of bonding social capital are the ability to enforce reciprocity and mobilize individuals for action. One example of bonding social capital is the response to individual or collective emergencies to ensure the community members who may not be physically or financially able to care for themselves are looked after by other network members (Putnam 2000; Diani 2007). In this example, bonding social capital is present due to the often shared, homophilous relationships of people living in close proximity. Through repeated interaction, similar cultural, and socio-economic backgrounds, shared values, and more there is an opportunity for strong, bonding ties to form. These individuals and neighbors watch after for one another for the invested interest that they will benefit down the road. In short, when they are in need they can trust the neighbor they helped in the past to help them when they are in need. Social movement literature accounts for the advantage of strongly tied networks of individuals sharing a collective identity. Collective identity parallels the homophilous relationships of bonding social capital, as actors share emotional investments and points of view with others that bond their personal identities (Melucci 1989). For social movements to succeed there needs to be a shared identity among groups and their organizations that will result in a shared vision for how to collectively act to create the desired social change. Without bonding networks sharing a collective identity, there is little opportunity for developing collective action (Putnam 2000; Goodwin et al. 2007).

Some of the limiting aspects of bonding social capital are that network members may display behavior that is inward looking, thus reducing network members' ability to expand relationships, gain new information, resources and opportunities (Portes 1998; Narayan 1999; Putnam and Feldstein 2003; Flora and Flora 2008). Portes (1998) describes four potentially damaging effects of bonding social capital. First, social capital may exclude outsiders from entering the network, as newcomers may not be considered trustworthy or part of the ingroup. Second, social capital can create excessive claims on members, e.g., asking them to join clubs, attend rallies, or purchase certain types of goods, which can drain their time and resources. Third, individual freedoms may be restricted where an individual(s) privacy or autonomy are reduced due to strict network oversight and expected conformity to network roles. Finally, a downward leveling of norms may occur when an individual is expected to

conform to the prevailing educational or income levels of the group. In this case, norms and sanctions can limit upward mobility, the development of innovative ideas, and building relationships with outside networks. Consequently, people tend to remain in their network even if it may potentially harm them, their livelihood, and the potential progress of their network.

The above caveats of bonding social capital, primarily the exclusion of outsiders, are barriers to increasing bridging social capital. Prior research emphasizes the importance of establishing relations through indirect or weak ties that enable the infusion of new information into networks (Granovetter 1973; Putnam 2000; Soule 2007). Weak ties characteristic of bridging social capital are relationships that are not emotionally strong, such as those between acquaintances. Bridging social capital is made available when two otherwise disconnected individuals or groups become linked. The fostering of these new relations allows access to new information and non-redundant resources (Burt 2001b; Putnam 2000). However, bridging social capital does not simply mean outside connections will provide new information and/or valuable information that will benefit the actor(s); it only increases the opportunity to access new information and resources (Lin 2001).

The current status of bridging and bonding social capital at the organizational level is one of the main interests leading this research. Social movement scholars have detailed the advantages of establishing network ties to advance the shared missions of these organizations in the belief that these ties are critical for realizing movement goals (Soule 2007; Given et al. 2010). Up to this point, social movement literature discusses the importance of both weak and strong ties for understanding the diffusion of tactics and strategies for social change. The

adopters of these tactics are typically those individuals and their organizations sharing a collective identity around a grievance (Soule 2007), similar to bonding networks.

Preliminary research has demonstrated that there is evidence of bonding social capital in the Marin County local food system's network of organizations. There are a few main organizations that are primarily working together to support the economic aspect of the food system; the production of food, aiding farmers and ranchers in facilitating innovative production methods, marketing and product promotion. In other areas of the food system, organizations with an emphasis in community food security, education and outreach, as well as environmental sustainability are also showing evidence of bonding social capital (Haskell et al. 2012). However, what seems to be lacking is bridging social capital among organizations working in different areas of the food system. The fragmentation of the food system may be the potential cause for a lack of a collective identity among participating organizations currently working within key areas of the local food movement. The lack of bridging social capital may be linked to a lack of competence trust, or in other words, the perception that another organization is incapable of adequately addressing the needs for a more sustainable food system. As a result of a lack of trust, there are insufficient resources available for network actors (organizations) whose work is relevant to increasing the sustainability of the local food system. Therefore, it is important to understand how bridging social capital may enhance collective identity. It is evident that the alternative agri-food movement addresses numerous grievances related to the conventional food system (Starr 2010; Allen 2010). Similarly, organizations and advocates within the local food movement seek to address grievances surrounding the access of local food for low-income populations, conserving land for future generations of farmers, maintaining a healthy environment, and

more. These are qualitatively different areas of focus but nonetheless important for increasing the sustainability of the local food system. Alternative agri-food literature discusses the need for community food stakeholders to network and build coalitions in order to address food security (Campbell 2004; Stevenson et al. 2007). However, alternative agri-food movement literature does not, as of yet, describe the role social capital plays in maintaining networks nor the potential barriers of bridging networks that would allow for a framing process to develop master frames to form collective identity. Although this research does not analyze in depth the framing issues, I am looking for evidence of potential issues regarding framing, which would ultimately result in framing disputes. Framing disputes are may occur when two or more organizations have difficulty working together if they cannot agree upon the suggested direction for collective action (Benford and Snow 2000).

Alternative agri-food movement literature, along with local food movement literature do not detail how frame disputes may develop around which components of the food system deserve the most attention, and this research begins this conversation. Upon initial observation of the literature and my own personal interaction and research with many of the organizations in this study, the lack of collaborative work may be due to the perception of whether one organization's frames and messages are legitimate and resonate well with others. Furthermore, this perception may also be directly related to the existing types of social capital occurring in the county; if there is a lack of bridging social capital, then there will likely be less collective identity within the total network. Social capital concentrated within interorganizational networks will be analyzed using social network analysis, and the perceptions of organizational leaders regarding framing and collective identity to help determine the presence of frame disputes.

Social Networks

A social network is a key component of social capital theory. In its most basic form, it is defined as a social structure composed of relationships among interconnected actors (Knoke and Yang 2008). A social network is relational by nature, and used to map, measure, and find patterns among the multiple connections between people and/or organizations (Wasserman and Faust 1994; Johnson et al. 2010). To begin analysis of any network, there needs to be a minimum of two *nodes* or *actors*, which can be people, organizations, or any entity processing, transferring, and exchanging information and resources. These actors share a common link called a *tie, connection* or *edge* (Scott 2009). These three pieces of data-two actors and one tie-make up the initial unit of analysis of the network. For this research the social capital of organizations will be analyzed by measuring network centrality characteristics. Social movement theorists have found centrality measurements to be useful indicators for determining the most effective communication channels (Phillips 1991), which can encourage collective action between organizations (Ernstson, Sörlin, and Elmqvist 2008). Network features, such as direct and indirect ties are relevant to centrality for determining the increased ability for social movement actors to develop trusting relations for sharing resources, and the diffusion and adoption of innovative strategies and frames (Strang and Meyer 1993; Givan et al. 2010). Moreover, in conjunction with measuring tie strength, social network analysis can determine the network position of each organization in the network. This reflects the level of interaction taking place among actors within a network and relative power of network actors to facilitate or prevent the flow of resources (Scott 2009). Thus far, local food movement scholars have yet to utilize centrality measurements to aid their analysis social capital among network actors. By analyzing these centrality measurements, there will

be an opportunity to compare and contrast previous findings in social movement literature, and contribute to the local food movement literature. Centrality and the applicability of the measurements in relation to this research will be elaborated upon in Chapters 3 and 4.

The literature reviewed above has provided insight about the relative importance of the types of social capital (bonding and bridging) among interorganizational networks, primarily in relation to developing a collective identity. The purpose of this exploratory research is to examine the effects of social capital on interorganizational behavior among the Marin County local food system's organizations. Based on current social movement research, I expect to discover evidence of an association between collective identity and the collective action within segmented areas of the food system (Benford and Snow 2000). Stated differently, the higher collective action among certain types of organizations within Marin County's local food movement is associated with a shared collective identity. These associations are measured by observing the total network of organizational leaders who participated in Phase I data collection. Based upon observing the centrality scores of the organizations, I expect to identify evidence of higher levels of collective action that is directly associated with indicators of collective identity. Triangulating these centrality measurements of collective identity and collective action with perceptions of the directly tied organizational leaders observed in both Phase I and II, there may be evidence of relationships influenced by social capital, In short, collective action is dependent upon bridging and bonding social capital. Instances where there is a lack of collective action, prior social movement research has determined there is a lack of collective identity (Benford and Snow 2000; Buechler 2011). In order for collective action to take place, a collective identity must be established among movement actors, which is highly dependent upon the bridging of

frames with other movement actors (Smith 2007). Social movement researchers also contend that a lack of a master frame among social movement actors is due to a lack of collective identity, which ultimately leads to a lack of collective action (Snow 2007). However, a master frame cannot be realized if collective identity is not first established. The processes of analyzing collective identity in this research is an adaptation of the work of Gerson and Peiss (1985), looking at two of their three identifiers: *boundaries*, and *consciousness* of network actors. This research intends to build upon these observations by analyzing organizations' centrality measurements to help demonstrate that bridging and bonding social capital may be associated with collective identity and collective action within in the local food system. These centrality measurements are elaborated upon in Chapter 3. However, due to the inability to observe these centrality measures over multiple periods of time, testing causal relationships is not possible. Instead, I seek to help explain and predict an association among the indicators of social capital, collective identity, and collective action. Based upon the analysis and triangulation of Phase I and II data, I anticipate observing the following:

Lower levels of collective action among organizations in the local food movement are associated with a lack of collective identity.

Lower levels of collective identity among organizations in the local food movement are associated with lower levels of bridging social capital.

CHAPTER 3: METHODOLOGY

Data for this dissertation were collected between the September of 2012 and May of 2013, beginning with preliminary research conducted while working on a cross-sectional food system assessment (Haskell et al. 2012). I was a partnering member in the food system assessment team, which provided me with access to the leaders of local food systems organizations, as well as an opportunity to be a participant observer in the local food movement in Marin County. The methods to test the above hypotheses incorporated a twophase process. Phase I involved gathering quantitative survey data (the survey can be found in Appendix A) from directors and other key personnel currently working in the organizations supporting one or more areas of the local food system in Marin County, CA. The quantitative survey tool was thematically arranged around indicators of competence trust: collaboration, framing, and network ties. The analysis of the survey was coupled with a social network analysis that was primarily used to measure centrality of network actors. Social network analysis in particular is beneficial for measuring indicators of social capital for its ability to demonstrate qualities of the relationships among network actors both visually and numerically (Prell 2012; Kadushin 2012). Social network analysis and centrality measurements are elaborated upon in the next section. The second half of my data collection included in-depth, face-to-face interview questions (the interview schedule is located in Appendix B). Combining both kinds of data permits the triangulation of findings and strengthens validity and reliability claims. In addition, this mixed methods approach helped to reveal areas requiring future research (Dillman, Smyth, and Christian 2009; Creswell 2009).

Sampling

Social network analysis requires defining the boundary of network population. For Phase I sampling, the research boundaries were limited to the organizations located in Marin County. I originally identified 52 organizations in Marin County that are considered social movement organizations as defined by McCarthy and Zald (1977). Each of these organizations have board members and key personnel that work with and/or have collaborated on countywide projects that support the local food movement. Selecting the sample population of organizations stems from a list accessed from a Marin County organization whose staff has been seeking to connect other organizations in the county working on similar topics. In addition, I identified those organizations that have worked in any of the following areas of the food system over the past year: production (farming, preservation of natural spaces, environmental stewardship that will allow for future access to natural spaces for food cultivation and biodiversity); processing (programmatic assistance in processing locally produced goods for marketing and distribution); distribution (programmatic assistance and promotion of local foods to different market outlets, including farmers markets, grocery, institutional cafeterias, food banks, and more); consumption (outreach and education at point of purchase, within institutions, and all along the food chain about the benefits of local food); waste removal (organizations that are seeking alternative means for handling food from all points along the food chain). In addition to these areas, I narrowed my choices of organizations that were actively working toward sustainability efforts in relation to the social, environmental, and economic aspects of the food system, and all along the food chain. The sampling strategy was adapted from previous network analyses (see Johnson et al. 2010). However, the list was not complete and other organizations were

located through word of mouth as well as conducting on-line searches, such as the website, Guidestar⁸. Other organizations were located through simple Google searches for non-profits working in the Marin County food system. These searches allowed for analysis of their websites and partners. For example, many organizations' websites have a list of names of other county organizations and personnel with whom they have collaborated. Upon reviewing the available websites and literature produced by the list of organizations, the database of organizations was updated and forwarded to three key informants actively working within the county's local food system. The organizational data was verified as being current. However, the sampling strategy did not come without some shortcomings. There were some organizational personnel that did not consider themselves as a part of the food system. Therefore, more clarity about the selection process may have been necessary in the recruitment of the sample.

Questions for the survey used in Phase I were adapted from two previous studies (Sharp 1998; Johnson et al. 2010), with additional questions developed after pre-testing the survey with trusted colleagues and others familiar with the food system in Marin. In addition to the questions to measure social capital, I included a set of questions to measure organizational attributes as indicators of trust including age of organization (time active), annual revenue, education, and years active in the county. These questions provide insight regarding whether or not these attributes are contributing to network centrality measures and social capital.

Upon IRB approval each of the original 52 organizations was contacted via an invitation letter detailing the purpose of the study and their role as a participant. The letter

⁸ For more information about Guidestar see: http://www.guidestar.org/

also noted I would contact them in the next week to discuss any questions and to follow-up regarding the survey. I called each of the organizations to address any questions, and then I emailed them a hyperlink to the on-line survey, which was provided through Survey Gizmo.⁹ Each questionnaire was accompanied by an electronic cover letter, which thanked them for their participation and provided an overview of the study, participant rights and contact information should they have any questions. Included as an attachment in the email was a roster of the 52 organizations, which adheres to the roster choice method outlined by Scott (2009) to aid memory recall. For those that did not fill out the survey within the first week, I followed-up in the next week with a reminder email letting them know I would contact them if they had any questions. After a week I then called those who did not participate after the reminder email to inquire about any questions or reservations they might have about filling out the survey. Many explained it was "too long", or "they didn't have enough time", or, they "didn't feel their organization 'fit the criteria of supporting the local food movement". Some agreed to "take another look" at which time I sent them an updated email that included the hyperlink to the survey. In total, I received 20 complete responses from the initial 52 organizations, for a response rate of 38 percent.

Survey responses were compiled and stored in Survey Gizmo. Each of the 41 questions was analyzed to capture information about the organization, such as organizational attributes, for example mission focus, while other questions were analyzed to determine, for example, with whom each organization interacts. For the analysis of the network-based questions, a 20 by 20 matrix was developed in UCINet to measure centrality. The responses

⁹ For more information about *Survey Gizmo* see: www.surveygizmo.com

to the questions were dichotomized into codes of "0" or "1", where "0" = "absence of network tie" and "1" = "presence of network tie". Individual tests were run. I ran a number of analyses on the ties present among each of the participating organizations, using the variety of centrality measures using NetDraw, a Network Visualization Software that comes bundled with UCINet. NetDraw allowed me run the different tests to visually display the centrality measurements and determine the number of beneficial ties each organization has in comparison to others (Prell 2012). Many of the organizational interactions reported by the 20 respondents in the matrix included organizations from the original list of 52 organizations as well as others. As a result, those additional organizations were included for analysis in an effort to gain a clearer understanding of the importance of non-respondent organizations.

Social Network Analysis

Phase I data were analyzed using standard statistical procedures and network analysis to determine the network structure of the organizations in the study. Three centrality measurements are used to determine actor location and prominence in relation to the overall network: degree (in-degree, out-degree), eigenvector, and betweeness centrality (Knoke and Yang 2008; Scott 2009; Johnson et al. 2010; Prell 2012). They are particularly useful in determining areas within a network where social capital is likely to be present, as well as suggesting the presence of collective identity, and collective action. Moreover, social network analysis can also help determine opportunities for bridging social capital. *Degree centrality (in-degree)*, determines the activity or involvement among network actors. The rationale for using this measurement is to identify which organizations have the most incoming connections within the network. Those with more connections can be perceived as more actively engaged in the total network by observing frequencies of connections (Prell

2012). For this study, degree centrality helps determine a multitude of measures ranging from identifying social capital by way of analyzing information channels, to measuring collective action by observing levels of collaboration among organizations. For example, social capital, as a measure of trust, was determined by posing the question about information channels: "Please list the names of the organizations that normally contact you when they are seeking program support." The higher frequency of selection of a particular organization resulted in a higher indegree measurement for that organization. This equates to a higher level of trust by other organizations when seeking information that may benefit their own organization to aid increased sustainability for the local food system.

The second measurement of degree centrality is *out-degree centrality*, which is the opposite of in-degree in that it is seeking to understand how network actors direct or expand their network connections to others within and beyond the network (Prell 2012). The application of out-degree centrality was measured, for example, by observing responses to the same question posited above. Based upon their frequency of selecting other organizations (their outdegree), these organizations can be considered as trusting those organization(s) they selected. The importance of this measurement is three-fold. First it determines with which organizations the organization is working on a regular basis. Secondly, this measurement couples well with the in-degree measurement as there is evidence of a reciprocal network relationships. Organizations sharing outdegree/indegree relationships have the opportunity to improve organizational outreach and program development of each other's organization. Finally, reciprocal relationships provide a measure of bonding social capital and can be associated with evidence of a collective identity among those particular network actors.

Bonding networks often exhibit shared values, and other homophilous characteristics indicative of collective identity.

Degree centrality is also used to determine levels of collective identity, as well as collective action. Collective identity was measured by asking respondents who they believed were the leader organizations within the county. By observing the degree centrality of the organizations, those with higher levels of indegree centrality were chosen as the leaders. Observing the outdegree scores in conjunction with the indegree scores, it is possible to determine inferences of collective identity if "likeminded" organizations were more prone to choose one another. Similarly, I use the degree centrality measures I can determine which organizations have worked together over the past year on projects that will fulfill their mission statements addressing the local food system. In sum, degree centrality is a measure that is versatile and used to aid observing a number of concepts to aid the research for this dissertation.

Eigenvector centrality measures the extent to which an actor is connected with *other* well-connected actors, such as those with high degree centrality scores (Bonacich 1972; Prell 2012; Borgatti, Everett, and Johnson 2013). Eigenvector centrality scores show how organizations can increase their presence in their network and community. Actors with high eigenvector centrality scores are well-positioned to gain access to the direct ties of actors with high degree centrality. As a result, there is an opportunity to increase their own access to information, as well as diffuse information into these other networks.

Betweeness measures the number of times an actor falls along the shortest path between two separate actors. Actors with a higher score of betweeness are able to link

together actors that are otherwise unconnected, which creates opportunities to take advantage of information and available benefits provided by these actors (Freeman 1979; Prell 2012). Betweeness provides a picture of the entire network, unlike the centrality measurements of in-degree and out-degree that only demonstrate the number and direction of ties one actor has in comparison to another (Prell 2012). The advantage, therefore is the ability to determine the position of an actor within the network, not just 'who one knows within the network.' Here, the actor may be located between two or more clusters of actors representing qualitatively different networks. This is important to understanding how one actor may be a "broker" between two or more network clusters. The location between two networks enables their ability to draw information from both networks, as well as act as a buffer between how much information or access individual actors from either network may have with the other network. Finally, both betweeness and eigenvector centrality provide an understanding for potential opportunities for bridging social capital into networks that are currently unconnected, but perhaps share one or more mutual connections. These potential connections may therefore enable increased opportunities for network actors to share information, and develop frameworks that can ultimately address local food system issues.

These three measurements are the initial means used for analyzing networks for evidence of social capital, and collective identity, and collective action. As noted by social movement researchers, collective action is more likely to occur when individuals and their groups share a collective identity (Melucci 1989; Benford and Snow 2000). Those sharing collective identity, such as those holding strong ties with likeminded individuals, is indicative of social capital (Portes 1998; Putnam 2000). These centrality measurements are also used to infer potential areas where social capital and collective identity may prosper in order for

collective action. Table 3.1 provides an overview of the operationalization of the social capital, collective identity, and collective action to aid the expected associations for this

study.

Table 3.1: Social Capital,	Collective Identity,	and Collective Action

ConceptualizationMethods for measurementSOCIAL CAPITAL: trusting relationships between organizations and/or individuals that enable the cultivation and utilization of tangible and intangible resources by network members (Putman 2000; Portes 1998; Coleman 1988)Higher levels degree centrality (combination of indegree/outdegree) indicate higher levels of strong ties (see Table 4.7); this is one measurement of <i>trust</i> Higher levels of indegree centrality in relation to <i>information channels</i> denote organizations providing information, while higher levels of outdegree centrality denote organizations seeking information channels is a measure of <i>trust;</i> Reciprocity, another measure of social capital, is demonstrated by observing the sociogram detailing <i>information channels</i> ; Reciprocal behavior, those seeking information from one another, denote <i>trust</i> (See Figure 4.2). Information channels are also noted by betweeness centrality, which	Table 5.1. Social Capital, Conective Identity, an	
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Table 3.1 Continued

Conceptualization	Methods for measurement
COLLECTIVE IDENTITY: shared consciousness and sense of "we-ness" which defines, bonds and motivates individuals around a collective interest(s) (Gerson and Peiss 1985; Snow 2001)	 <i>Perception</i> of a collective identity is measured both quantitatively and qualitatively; Phase I data seeks information related to <i>self-identification</i>—for example, how the participant defines their role in the food system. Degree centrality measures analyzing respondent's perception of <i>leader</i> organizations (see Table 4.3); organizations with higher levels of indegree centrality are those denoted by others as being leaders in the local food movement Phase II, in-depth interviews reveal perceptions of leader organizations are "leaders", and responsible for developing policy in the county (see pg. 70); Triangulating these findings with Phase I data permits identification of collective identity
COLLECTIVE ACTION: goal-oriented activity	patterns. Determined by asking respondents in
of two or more individuals whose collective	Phase I about their <i>collaboration</i>
efforts often take place in public, institutional	efforts over the past year
spaces and can vary from the humdrum which does not garner much attention to the dramatic	Measured by degree centrality; the higher level of degree centrality among
such as public protests (Tarrow 1998; Snow et al.	a set of organizations determined
2007). Food system examples include alternative	higher levels of collaboration.
agri-food initiatives, such as farmers' markets,	Analyzed as having a causal
and community supported agriculture (Allen	relationship with social capital and
2010)	collective identity, which precede
	collective action

The main indicators of social capital being used here are related to trust and reciprocity. Degree centrality will provide data of those organizations that are most closely tied through direct connections. In other words, direct ties are those expressed relationships between two or more organizations. These relationships may be mutual, denoted by the degree centrality (in/out degree) measures of organizations. Here participants may have chosen one another's organization, which may be inferred as another measure of trust and subsequently an identifier for the presence of social capital. Trust may also be indicated by analyzing centrality measures of organizations sharing information. Moreover, information channels that are reciprocal, that is two or more organizations sharing information with one another, may indicate the presence of social capital among those organizations.

This analysis will be used in conjunction with the observation of key identifiers for the construction of collective identity as outlined by Gerson and Peiss (1985). Boundaries and consciousness as evidence of collective identity are measured using Phase I and II data in conjunction with network centrality statistics. Identifiers of collective identity include, for example, degree centrality, and perceptions of which organizations constitute 'leader organizations'. The 'perceptions' are analyzed using Phase II data. The methods for collecting Phase II data are discussed in the following pages. These identifiers are established to aid an understanding whether social capital may be contributing to a collective identity. By comparing centrality measures from social capital and collective identity indicators, I can begin to determine if there is an association between social capital and collective identity in the local food movement. Up until now, social movement research, including local food movement research, has not utilized centrality measures to serve as a means for identifying collective identity. Furthermore, social capital has not been used to help explain the development or absence of collective identity.

The analysis of social capital and collective identity are used to determine the breadth of collective action in Marin County. Ultimately, the analysis of collective action in Marin County will help determine if social capital and collective identity are concentrated among particular organizations. Moreover, the analysis will aid an understanding where bridging social capital may be possible, and the potential barriers for realizing a more encompassing

collective identity among the total network. One of the main measures of collective action in Phase I is 'collaborative ties'. The higher centrality scores for collaboration among organizations will help identify those organizations that are collectively acting together more often than not. If there is evidence of higher levels of collaboration among organizations, the next step will be to determine if there is an association of the presence of social capital and collective identity among these same organizations. The primary goal for Phase I research is to begin building this bridge for future analysis in collective identity and social capital in local food movement research.

The data gained from Phase I is intended to be triangulated with Phase II data, the qualitative data obtained through face-to-face interviews with key personnel from organizations (see interview schedule in Appendix B). Upon IRB approval for the second phase of data gathering, I mailed Phase I respondents an invitation to participate in a personal interview. In the letter, I again informed them of their rights as a participant, the goals of the study, and a notification that I would follow-up with them in a week to verify an appointment to meet in person for the interview. Of the 20 respondents, only 10 were able to meet with me for face-to-face interviews. Each interview lasted between 45 minutes to 1.25 hours, and was conducted at a time and place that was convenient for the respondent. The interviews were digitally recorded with the consent of the participant, transcribed, and analyzed with NVivo 10 software. To aid the transcription, I also kept a matching record of field notes for each individual respondent. These notes were also digitally recorded using Livescribe software, which allows for both voice recording and the digital transference of written notes into data files to be securely stored with the original transcriptions, which were stored as a Microsoft Word file on my home PC. The field notes primarily provided more in depth understanding

of the interviewee's meaning through implied and interpreted verbal cues and body language. These cues were then matched with verbal responses from the interviews.

The Word files containing the transcriptions were uploaded into the qualitative data analysis software program, NVivo 10, where each interview was read through line by line to begin the coding process. To code the data, I used the grounded theory approach described by Strauss and Corbin (1998) and Creswell (2009). I first began with the process of open coding, reading the transcriptions line-by-line to determine common themes and descriptions of organizational relationships that resemble evidence of social capital. I then created unique codes according to the main features of the question.¹⁰

The analysis of each relevant code will be discussed in further detail in Chapter 4, but it is necessary to provide some insight to the method of developing codes. For example, to help respondents become more comfortable talking about their organization, I asked them: "Please tell me about your organization". Their responses were highlighted and coded in NVivo within the code labeled "Type of organization". The type of organization and their mission is a key part of my analysis in relation to bridging and bonding social capital. Three main types of organizations working within the local food system were conceptualized according to their mission focus. These were coded as "social sustainability", "environmental sustainability", and "economic sustainability". All three of these codes represent the main areas of focus of each organization. Because respondents would often crossover into separate but relative topics related to the question at hand, I developed sub-codes within the main codes such as "food production, "land conservation", "social equity", to clearly distinguish

¹⁰ Nodes can be understood as placeholders or "containers" for topics or concepts that are relevant to the study. The codes are determined by the responses that are relevant to each node (Bazeley and Richards 2005)

the role of each organization. This process of identifying codes and sub-codes was repeated throughout the initial open coding process.

Upon developing the initial codes during the open coding process, I returned to the coded passages to reanalyze their content using axial coding. Axial coding allowed for the analysis and connections between the primary codes and sub-codes (Strauss and Corbin 1998), which ultimately started me on a clearer path for identifying the relationships between the varieties of codes. For example, I wanted to know how one organization's mission was directly tied to another's, and under what circumstances might they be more inclined to link with another organization, even though their missions are qualitatively different approaches to sustainable local food system. These observations helped me develop theoretical arguments for the development of social capital as it pertains to bridging networks. Deeper analyses of these theoretical relationships are expounded upon in Chapter Four.

The final phase of coding involved selective coding, where I was able to narrow down the coded themes from the axial coding process to select a core category (Strauss and Corbin 1998). Selective coding helped to develop a storyline around the central theme (social capital among organizations). This was utilized to allow me to validate the effects of social capital upon organizational action through narrative examples. In this case the theme centered around the core category of trust (social capital) as it relates to the perception among organizational leaders and their willingness to collaborate. In the next chapter, I present the findings from Phase I and II, which then leads to the discussion of findings in Chapter Five, which includes recommendations for enhancing the effectiveness of organizations and for future research in the local food movement.

CHAPTER 4: FINDINGS

The findings for this research are based upon two main research phases. In Phase I, the analysis centers around two key areas: the on-line organizational survey and interorganizational network data. Table 4.1 provides a snapshot of the distribution of the types of organizations sampled in both phases of research. Of the 52 social movement organizations that were initially identified prior to initiating Phase I research, a total of 20 surveys were completed (N=20), for a response rate of 38%.

	Agriculture: Percentage (n)	Environmental: Percentage (n)	Community: Percentage (n)
Phase I			
Total population (N=52)	29 (15)	23 (12)	48 (25)
Response rate 38% (N=20)	30 (6)	20 (4)	50 (10)
Phase II			
Total population (N=20)	30 (6)	20 (4)	50 (10)
Completed interviews 55%			
(N=11)	45 (5)	27 (3)	27 (3)

 Table 4.1: Distribution of Organizations

The response rate is indicative of the method of delivery. On-line delivery of surveys will tend to have a lower response rate than paper surveys (Dillman et al. 2009) or those conducted face-to-face (Borgatti et al. 2013). Within the 20 returned questionnaires some had missing data, which is common in social network research, and can be attributed to a number of issues (Scott 2009; Prell 2012). Both the response rate and missing data for this research may have been related to boundary specification and respondent fatigue. Respondents who did not fill out the survey expressed doubt about the relevance of their organization's work to the local food system. Similarly, some respondents chose not to fill out particular questions, as they felt they were not relevant to their organization's role within the county. However,

this is not a drawback of the overall study, but rather a potential indicator for how an organizational leader identifies their work within the county and its relationship with the local food system. In short, the lower response rate among some of the organizations may infer a lack of collective identity and understanding for the potential role their organization may play within the local food system's diverse components.

Organizational Characteristics

One of the objectives for this research was to explore the collective identity of organizations within Marin County to determine the likelihood for collective action. The stated function or role of an organization within the county is one of the identifiers for analyzing collective identity. Table 4.2 provides a brief summary of the stated focus of organizations that participated in the online survey, as well as some of those included in the face-to-face interviews.

Organization	Year Founded	Programmatic Focus (Mission)
01	1983	Public education about benefits of local food; linking communities with farms via markets.
00	2004	
02	2004	Child and family nutrition education; production and procurement of local food through garden program, and county food banks
O3	2003	Facilitates collaborative efforts to address issues in Marin communities including homeless services, community gardens, health and transportation, environmental education, veterans programs, and more.
O4	2001	Organic certification agency promoting sustainable farming practices; provides services for the local
O5	1974	Provide shelter, counseling, job training and more for Marin's homeless population; programs include food production and processing.
O6	2011	Edible landscape design to supplement community food sources; public education and training
07	2008	Enhancement of carbon sequestration in agricultural, rangeland, and forest soils; applied research, public education, and implementation
08	1999	Promotes environmental and economic sustainability and social well-being

 Table 4.2: Organizational Brief

Organization	Year Founded	Programmatic Focus (Mission)
09	1934	Environmental preservation and protection for the public. Consultation on environmental policy, research and education
O10	1995	Advocates for healthy communities; mitigate diseases related to diet and environment
O11	1986	Management of philanthropic contributions aimed at improving the quality of life of Marin communities.
012	1863	The legislative and executive body of Marin County; enacts ordinances, determines policies, adopts annual budgets and more.
013	1921	Sustain agriculture, environment, and community in Marin County through research-based information in agriculture, natural resource management, nutrition, and youth development.
O14	1973	Protection and conservation of natural environment; public education and outreach
O15	2010	Community garden development and consultation for Sausalito
O16	1999	Production of food through institutional garden for local food pantry, residential use, and therapy.
017	1959	Provides leadership for residents in education, health, wellness, public safety, land use planning, and more; management of community gardens and donation to county food banks
O18	2008	Establish, preserve, and enhance common spaces in West Marin; encourage resource sharing, conservation, and learning.
O19	1980	Preservation of farmland for agricultural use; public outreach and education to support and enhance agriculture in Marin.
O20	2001	Create standards for organic agriculture in Marin; develop economic opportunities for farmers; public outreach and education about Marin's local food, agriculture, and environment

Table 4.2 Continued

Note: The table is color-coded in relation to the type of organization; green=environmental; yellow= agricultural; red=community

The left-hand column provides the organization's code name, which is used throughout the discussion and analysis. The middle column is the year the organization was founded. The "age" of the organization serves as an indicator for aiding the development of trust among other organizations within the county. The right-hand column provides a brief description of the participating organization's role in the county as it relates to their area of focus, and strategies for addressing grievances for a more sustainable local food system. The boundaries, such as the mission and other relevant characteristics of participating organizations, are the indicators of collective identity. Table 4.3 provides information regarding the organizational characteristics derived from the Phase I survey.

Table 4.5. Organizational Charac		. .	a .	
	Agriculture	Environment	Community	Median
Type of Organization (N=20)	(n=6)	(n=4)	(n=10)	Totals
Identify with category %	55	60	55	
Median number of years in Marin				
(N=20)	21	28.5	20	21
Median number of employees				
(N=20)	8	1	8	4
Median number of volunteers				
(N=19)	11	38	20	20
Number reporting membership in				
other Marin organizations	13	10	7	30
Ũ				
Number reporting membership in				
non-Marin organizations	5	5	1	11
	-	-	_	
Median Net revenue (2012-13)	\$137,375	\$75,000	\$500,000	
		1		
Organizational leader attributes				
Median # of years working in				
current position	5.75	5.25	5	5
Education (reported by	5.75	0.20	5	•
frequencies)				
High school	0	0	0	0
Some College	1	0	0	1
Bachelor's Degree	2	1	3	6
Post Graduate Degree	3	1	7	11
1 ost Gludude Degree	5	1	,	Total
Gender (reported by frequencies)				
Female	4	3	6	13
Male	2	1	3	6
111010	<u></u>	1 	5	Total
				Total

Respondents identified their organizations as working within three main areas of focus: agriculture (55%), environmental sustainability (60%), and public outreach and education (55%). Some organizations offered multiple responses regarding their missions,

which accounts for the total exceeding 100%. Multiple organizations find their work rooted in the environment, but with a strong component of community outreach and education, as well as some work in agriculture. West Marin County is well known for its agricultural history. The organizations that have been working within the county for the most number of years are environmentally based organizations, with the highest median number of years 28.5 years. Higher median number of employees (8), volunteers (20), and net revenues, however, are characteristic of community outreach and education organizations. Organizational leaders reported affiliation with other organizations ranging from membership to actively sitting on the board of another organization. Agricultural organizations were the most common partner (n=13), while environmental organizations (n=10) and community outreach and education organizations (n=7) were reported less frequently. Organizational affiliation outside of Marin County was equally divided among agricultural and environmental organizations (n=5).

The organizational attributes above provide insight regarding the potential for developing social capital. The number of years an organization has been active in Marin means the organization has had more time to develop networks with other organizations. The 'track record' and presence in Marin speaks for itself if the organizations are perceived to be more capable of sustaining their presence in the long-term, and therefore are seen as more capable to address community needs, a more sustainable food system. The following comments from two organizational directors describe the value of long-term organizational presence in the county. Similar comments were expressed by the majority of Phase II participants (n=6):

"[O9] has been around forever. I don't know how involved they are and I don't think of them when thinking about agriculture issues. But they have a long history here in

Marin. And the [O1] isn't necessarily a young organization anymore. But I think [long-term presence has] some impact because people are kind of trusting that they have some sense of how the issues have developed over the years [O19], too." –O5 "Umm, you know I see [020] as being this great kind of grandfather organization. I've talked with them before. They seemed so well poised and that they work with farms and are this great clearing house of information. I think it's wonderful what they're doing now." –O15

The net revenue of organizations is an important variable for developing and maintaining network relations as it may help determine the slack resources available for network development. Net annual revenue for participating organizations from the fiscal year 2012-13 ranged between "Less than \$20,000" to "Over \$1 Million". Those reporting higher revenue are concentrated in the agricultural (\$137,375) and community organizations (\$500,000), while environmental organizations reported median annual revenue of \$75,000. The concentration of collaboration among agricultural organizations will be discussed later, but it is relevant to bring attention at this time to the identifiers of status and power as they relate to median years in the county and income. Agricultural organizations were second to environmental organizations in both categories, yet they demonstrate higher levels of collaboration as will be observed in the coming sections.

Organizational leaders participating in the study reported a median of 5 years working within their designated organization. Agricultural organizations were at the top of the range with a median of 5.75 years. These findings are particularly significant since developing relationships with other organizations requires time. The majority of these respondents reported having at least "some college", a bachelor's or post-graduate degree. Leaders of

community organizations reported the highest concentration of college degrees (n=10), while respondents working within agricultural organizations reported slightly fewer degrees (n=5). The primary interest in determining the level of education among respondents is to aid the analysis of human capital among participants in relation to interorganizational collaboration among those with similar personnel and demographic characteristics. For example, the gender of respondents may determine collaboration. Prior research has found that homophily of demographic characteristics assists in forming bonding relationships (Kadushin 2012). This research takes into account the homophilous relationships as evidence of bonding social capital as explained by social capital theorists (Coleman 1988; Portes 1998; Putnam 2000) and network analysts (Degenne and Forse 1999). As a result, homophily indirectly aids our understanding of concentrations of collective identity, as likeminded individuals are often found in bonding relationships that are often based upon similar interests. Homophily is mainly considered in this research for its ability in identifying likeminded individuals that are a part of particular types of organization(s) (Degenne and Forse 1999). These individuals may share some demographic aspects, as well as cultural. The emphasis of homophily will be considered for its ability to determine those individuals who share common beliefs and perspectives regarding the food system, which ultimately determines the direction of focus for the organization. Homophily and the relationship with organizational characteristics will be revisited and discussed further in Chapter 5.

Social Network Analysis

A series of survey questions were created to measure the social network features mentioned previously. The findings from these questions are depicted as sociograms, which are graphs showing network actors (organizations) and their relationships (ties or

connections) (Degenne and Forse 1999; Scott 2009). Network findings are described using both the sociograms and quantitative measures of centrality, with primary emphasis on the ego and alters. The former, ego network actors, are those actors who have reported an affiliation with another actor (the alter). When these relationships are present, I have depicted them by using directional arrows emanating from an ego network actor toward the alter(s). Each node (organization) within the sociogram is thematically shaped representing the general mission of the organization: agricultural oriented organizations (triangle nodes), environmental oriented organizations (circle nodes), and community outreach, health, and education (square nodes). The categories are broad due to the versatility of some of the work these organizations perform. However, if they are primarily an environmental organization, such as one that focuses on natural resource conservation, they were categorized within the environmental group and labeled accordingly with a circle-shaped node within the sociograms. I have also chosen this categorization method as a means to better protect the identity of the organizational leaders.

To aid analysis of the sociograms, each organization was assigned a specific number to track their level of activity within the network. The numbers are indicated within the sociogram and represent the organizations that were identified as working within the local food system in Marin County, which resulted in the original 52 member roster distributed to participants during data collection. However, the participants in the Phase I survey also identified additional organizations not listed on the roster, and as a result I have assigned these organizations numbers and organizational identifiers. The sociograms and the accompanying tables in the following sections illustrate the organizations that were elected (but did not participate) in the survey. I believe it is necessary to include all elected

organizations in the analysis even though some of them did not actually respond to the survey request. Their inclusion provides a more accurate perspective of all the existing relationships within the network.

Organizational Leaders

Phase I data collection involved determining which organizations are perceived as leaders in the county in relation to increasing the sustainability of the local food system. Figure 4.1 illustrates the level of perceived importance or leadership within the county for successfully attaining these goals. A total of 16 responses were recorded (N=16). Four organizations chose not to respond and were not elected by other organizations: O2, O16, O17, O18. The size of the nodes indicates the perceived importance of each organization in relation to others; the larger the node, the higher their degree score. The number of edges (links) directed from one organization to another summarizes the group's perception of which organizations are the leaders in promoting a more sustainable local food system for Marin. The four primary organizations that are perceived as holding a leadership role are agricultural organizations.

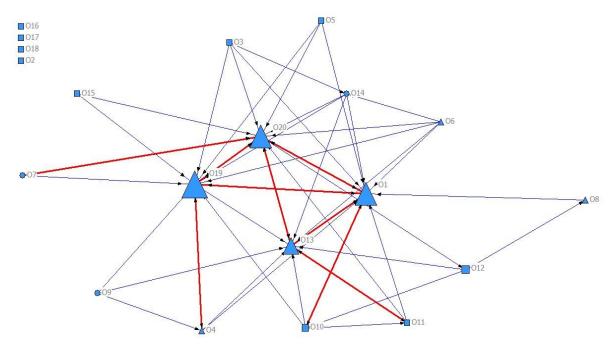


Figure 4.1: Degree Centrality of Organizations

Notes: The following symbols represent type of organization: Agricultural "▲"; Community "■"; Environmental "●"

These agricultural organizations share high in-degree centrality (Table 4.4). The bold red lines indicate multi-directionality where participants also elected each other as primary leaders within the county. The reciprocal perception of a leader organization may demonstrate a shared perception of importance regarding the other's mission or role in the county's local food system. These findings coupled with reports of collaboration (collective action) may infer collective identity is present among these particular organizations, as collective action is considered a result of collective identity. Overall, the perceptions of which organizations are leaders within the local food system are centered around the agricultural organizations. Identifying the agricultural organizations as leader organizations in general may also be an inference of a lack of collective identity on the part of nonagricultural organizations as they do not perceive themselves as "leaders" in a movement despite their critical roles. The following statements from Phase II respondents are indicative of how the majority (n=10) view the agricultural organizations as leading organizations:

"I think the [O21, O1], do a good job and they have raised the consciousness of the people about farmers growing local stuff. They've probably done a lot of advertising, but I think their message is effective. I think they can sway public opinion because they can make that personal connection for people "these are you neighbors, and they are farming."...and, what's happening there." -O6

"I think you know [O19] is very strong and they have an enormous amount of money in that organization. Their donors are influential, too. [O20] I think has played an important role, again, partially through their donor base, but also their programs they've implemented and volunteers. So I think in this county, it has to do with numbers and money. That's what I think really determines the power of an organization." –O7

The respondents are identifying two main points here: the ability of agricultural organizations to define the importance of local agriculture, and the perception that they have a lot of resources at their disposal. Other comments expressed the role agricultural organizations play in relation to developing policy at the county level. Members of the county's Board of Supervisors have been known to call upon a select number of agricultural organizations to collaborate on county-wide projects related to the sustainability of Marin's agriculture and food system. These organizations have been dubbed "The Dream Team". Additional emphasis must be placed upon the reciprocal choices of perceived leaders within the county. The reciprocal choice of perceived leaders may also be an indicator for bonding social capital, as social capital theorists have emphasized the characteristics of strong ties,

homophilous relationships, and exchange patterns among group members as indicators of bonding social capital (Degenne and Forse 1999). These patterns are especially interesting when looking more closely at the information channels (Figure 4.2), friendship and family networks (Figure 4.3), and collaboration networks (Figure 4.4).

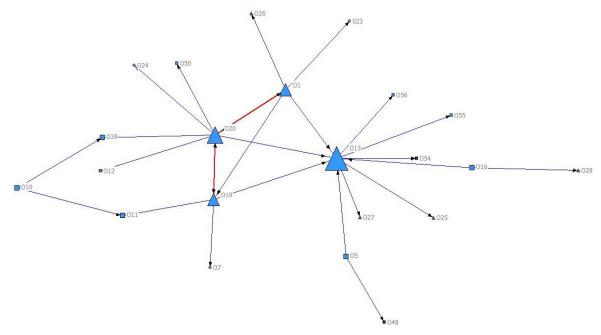
Node	Out-Degree	In-Degree
O6	5	0
O20	5	10
01	4	11
O3	4	0
O10	4	2
O14	4	2
019	4	11
O4	3	2
O5	3	0
09	3	0
011	3	2
O12	3	1
O13	3	10
O7	2	1
015	2	0
08	1	1
O2	0	0
016	0	0
O17	0	0
O18	0	0

 Table 4.4: Centrality of Perceived Leaders

Information Channels

One of the main benefits for examining information channels is to determine the potential for organizations to develop a cohesive framework and a more sustainable local food system by sharing and adopting new information. Survey participants were asked to list the organizations they normally contact for new ideas and practices to support their organization's mission. A total of 7 responses were recorded (N=7). The results are illustrated in the sociogram (Figure 4.2).





Notes: The following symbols represent type of organization: Agricultural "▲"; Community "∎"; Environmental "●"

Node	Out Degree	In degree	Betweeness
O20	7	2	11
01	5	1	4
019	4	2	4
013	3	5	15
O5	2	0	0
O10	2	0	0
016	2	0	0
07	0	1	0
011	0	2	0
O12	0	1	0

Table 4 5.	Centrality	/ for	Information	Channels
I and 4.3.		101	111101 IIIauvii	Chaminers

The centrality measurements for information channels are shown in Table 4.5. The out-degree centrality indicates the ego's identification of the other organizations they go to for new information. Therefore, the in-degree centrality measure shows how many other

organizations selected them as providers of information. The organization with the highest in-degree centrality score is O13, which is one of the leading agricultural organizations. Three of the four main agricultural organizations have reciprocal relationships when seeking new information (O1, O20, and O19), which is indicated by bold red lines. This reciprocal nature is an indicator of bonding social capital between these three organizations, as they are demonstrating a trust that is found among homophilous group members demonstrating an exchange relationship with the common purpose of enhancing its organization's effectiveness (Degenne and Forse 1999; Soule 2007). The majority of respondents would seek information from organizations located within Marin County, while a few were seeking information outside of the county. For example, O13 regularly seeks new information from O54, which is not one of the main 52 organizations identified within Marin County. The benefit for tapping into information outside of the network is to have an advantage of new, non-redundant information (Granovetter 1973).

The betweeness scores of the agricultural organizations are of interest as well. These organizations display the ability, and perhaps willingness, to actively seek out new information from a variety of other organizations. Strategically speaking their location *between* other organizations within the network allows them to be both the provider and gatekeeper of new information they have acquired. The organization with the highest betweeness score is O13, an agricultural organization, which is critical in relation to the type of information that is being shared with organizations indirectly, and directly linked to O13. The ability or willingness of an organization to seek out information from another is of great interest for this research. From a social movement standpoint, seeking out information and adopting new methods for addressing social grievances can be an effective strategy (Soule

2007). I was interested in how and why organizational leaders may or may not seek out and adopt new practices related to the local food system. I first wanted to know which channels were primarily preferred in learning about new methods for reaching target populations, and other strategies for fulfilling the organizations role in the county. Respondents were encouraged to pick from a number of options ranging from "Word of Mouth" to "Academic Journals", and they were able to choose multiple options channels of communication as well. A total of 17 responses were recorded, with the greatest number selecting "Website of another organization" (77%). "Word of Mouth" was the second choice (71%) and 59% selected "Social Media Websites". The use of the internet has created alternative methods to interact with others. This is an indicator of both direct and indirect ties with other organizations as new information does not necessarily diffuse via a strong tie with another, but they are still able to gain information by reviewing and analyzing their web material. Based upon Phase II responses (n=7) word-of-mouth is key and one of the benefits of interfacing with other organizational leaders.

"I'm on several boards. So it's being out there in the public and my board allows me that face time with all of these organizations to really be a community member." –O1 "There is a word of mouth network. Most likely from someone I know who will mention something. Because we're a volunteer org, and you can get through to us through the website but that's slow." –O2

Developing an understanding for how people learn new ideas and strategies is important because it is an indicator of the preferred modality for information exchange. However, analysis of the sociogram (Figure 4.2) reveals a lack of reciprocal networks, as well as an apparent lack of bridging relations among organizations. Only 7 of the original 20

respondents were seeking out information, and 4 of the 7 organizations were the leading agricultural organizations. The agricultural organizations are sharing information with other agricultural organizations, as well as bridging into non-agricultural networks, which greatly enhances their ability to acquire new information for their organization (Putnam 2000; Burt 2001b). Yet there are still questions about why some organizations may or may not choose to bridge into other networks to acquire information that may enhance their organization. From a social movement perspective, bridging ties is the act of utilizing the indirect network ties to determine the applicability of ideas and strategies for enhancing the collective action frames within a movement (Soule 2007). Survey participants were asked to choose from a number of options for why they may not have adopted an innovative practice or strategy into their organization. A total of 16 organizational leaders participated by rating their agreement to a set of questions ("Strongly Agree" to "Strongly Disagree") in relation to a series of possible reasons they may not have chosen to adopt a practice into their organization (Table 4.6).

	Strongly Agree % (n)	Agree	Neutral	Disagree	Strongly Disagree
a) Unaware of its applicability to my organization (N=11)	9 (1)	27 (3)	36 (4)	27 (3)	0 (0)
b) Not enough time to incorporate practice (N=12)	50 (6)	25 (3)	25 (3)	0 (0)	0 (0)
c) Lack of financial resources (N=16)	63 (10)	19 (3)	13 (2)	0 (0)	6 (1)
d) Lack of human resources (N=16)	63 (10)	19 (3)	13 (2)	0 (0)	0 (0)

Table 4.6: Frequencies of Reasons for Not Adopting Practices of Other Organizations

Thirty-six percent agree or strongly agree they may not adopt new ideas or methods due to the uncertainty of the applicability to their organization. On the other hand, over a

quarter of respondents (27%) disagree with this statement, while 36% of the respondents are neutral. The majority of respondents agrees or strongly agrees that lack of time (75%), financial (82%) and human resources (82%) play a limit their ability to adopt a new practice into their organization. The inability or limitations for adopting new ideas are useful for understanding the barriers that may be in place for bridging social capital as well. Without the ability to adopt new tactics and learn how the ideas will enhance the organization, there is less opportunity to incorporate innovative methods to enhance an organizations ability to address movement grievances (Koopmans 2007). Furthermore, due to these barriers, there may be less opportunity to collaborate and collectively act with other organizations working within the local food system. The following section builds upon the findings relating to bonding and bridging social capital with the analysis and findings from the collaborative networks.

Strong Ties

In Figure 4.3, the personal relations (close friends and/or family) of the organizational directors are presented. Participant's connections with family and/or friends employed by the other organizations are an indicator of strong ties (Granovetter 1973) and bonding social capital (Degenne and Forse 1999). This initial measurement of social capital can help determine if the concentration of strong ties are mainly among organizations working within similar mission frameworks. Furthermore, the importance of determining the location of strong ties within the network is to understand whether or not this indicator of social capital may contribute to collective identity. By analyzing the indicators of social capital with those of collective identity, potential associations may be inferred to help clarify the potential barriers for realizing increased collective identity and subsequent collective action. Social

movement research has demonstrated that developing a consciousness or awareness of a social movement (collective identity) is built and reinforced through interpersonal relations (Gerson and Peiss 1985). In addition to aiding collective identity, interpersonal relations, and strong ties such as those between close friends and family, aid recruitment and support for social movements and their organizations (Phillips 1991).

Of the 20 respondents, ten had either a close friend or family member in one or more of the other organizations within Marin County (Figure 4.3). Four organizations (O6, O9, O17, O18) did not identify a strong tie with another organization, nor were they elected by respondents; therefore they were not included in the analysis.

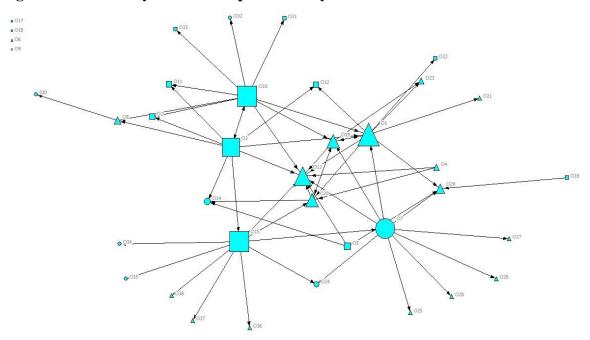


Figure 4.3: Centrality of Friendship and Family Networks

Notes: The following symbols represent type of organization: Agricultural "▲"; Community "■"; Environmental "●"

Figure 4.3 helps visualize and identify the most prominent centrality measurements.

Each node has a specific centrality measurement: degree (in-degree/out-degree), betweeness,

and eigenvector. The out-degree centrality scores indicate the frequency of selecting other organizations with which one has a strong tie. The in-degree centrality score indicates the frequency of participants selecting that particular organization as housing a strong tie. The higher out-degree centrality scores are spread out among community and environmental organizations, while agricultural organizations have higher in-degree centrality. The higher selection of agricultural organizations as having strong ties with other organizations is an indicator of social capital, and may infer collective identity by means of raised consciousness or awareness of the local food movement from an agricultural framework. Other highlights of degree centrality here are the organizations where a reciprocal connection is present. Reciprocal connections are indicated by two organizational participants identifying one another's organization as having an existing relationship via a friend or family member. The importance of identifying these reciprocal connections is that these sets of organizations are identified as working within the same field, and as a result are more closely analyzed in relation to their collaborative efforts in the following section.

	In-	Out-		
Node	Degree	Degree	Betweeness	Eigenvector
013	9	0	86.624	0.396
01	5	8	137.983	0.399
019	4	4	25.582	0.298
O20	4	4	25.103	0.264
O14	3	0	3.405	0.115
O2	2	0	0	0.106
08	2	1	32	0.109
011	2	0	0	0.106
012	2	0	0	0.12
O3	1	9	109.11	0.322
O7	1	9	155.781	0.298
O10	1	10	129.548	0.315

 Table 4.7: Centrality Measures of Friendship and Family Networks

NT 1	In-	Out-		T ' (
Node	Degree	Degree	Betweeness	Eigenvector
O15	1	9	168.783	0.265
O4	0	2	0	0.11
05	0	3	4.611	0.108
06	0	0	0	0
09	0	0	0	0
016	0	1	0	0.023
017	0	0	0	0
O18	0	0	0	0

Table 4.7 Continued

One of the most interesting measurements is betweeness centrality, which is depicted in the graph by the size of the node; the larger the node the higher the betweeness centrality an organization has. Nodes with higher betweeness centrality scores have the advantage of location within the whole network. The directors of those organizations are gatekeepers between the other organizations. A number of organizations have low betweeness centrality indicated by the small size of their nodes in the sociogram. However, due to their strong ties with organizations with high betweeness scores, there is opportunity for accessing the weak or indirect ties that are better connected. Therefore, the main importance for analyzing betweeness centrality is to establish the understanding that the personnel among the organizations with higher levels of betweeness centrality are key to holding the total network together. If the personnel from these organizations were to stop working for these organizations, the total network would ultimately change. In short, these individuals foster communication between otherwise disconnected network actors (Prell 2012), which may help build social capital and a collective identity within the network. Furthermore, these communication channels may allow the diffusion of new ideas to otherwise disconnected organizations, which is one of the main methods for developing collective identity by

building awareness (Gerson and Peiss 1985). Eigenvector centrality, like betweeness centrality emphasizes network location. The main difference, however, is the importance placed upon to whom one is connected, not necessarily the location within the network (Prell 2012). The eigenvector values indicate the possibility of an organization getting involved with key organizations within the network to improve their own organization's mission, reach, and more. In essence, the increased connections and potential connections that exist in this network may allow for an increased flow of resources between already connected organizations, as well as the indirectly tied organizations. Here eigenvector serves the purpose of demonstrating that those organizations with higher eigenvector scores are connected to actors having high degree centrality. Again, there is the advantage of those with high eigenvector centrality to interact with those with high degree centrality, which may increase the amount of information that is available to the former. Based upon what social movement literature has found with friends and family networks influencing collective identity, as well as recruitment into a social movement, there may be a higher likelihood for actors with higher eigenvector scores to be influenced by their strong ties (Taylor and Whittier 1992; Passy and Giugni 2001). Interestingly, the eigenvector scores from Table 4.7) indicate that the organizations with high eigenvector centrality scores are also those with high degree centrality. What this means is that not only are these organizations wellconnected in relation to having a high number of alters, but their alters are also wellconnected (Prell 2012). Therefore, these organizations that have high eigenvector values are also those with high degree centrality, which demonstrates the concentration of potential and existing social capital. This concentration degree centrality and eigenvector centrality is evident among the agricultural organizations.

Collaboration

Collaboration among organizations has proven to be strategically advantageous for both for-profit (Brass et al. 2004) and social movement organizations (Stevenson et al. 2007). One of the main interests of this research is to observe if and how organizations are working together in creating a more sustainable local food system in Marin County. Ten organizations (N=10) reported that they had collaborated with another organization in efforts such as hosting a community event around local food, for a median of 2.5 events over the past year. The sociogram in Figure 4.4 illustrates the collaborative ties among organizations over the past year (2012-2013). The unbolded ties indicate the out-degree centrality measure, where an organization nominated another as being a collaborating partner. The bold red ties within the sociogram indicate a reciprocal relationship where both organizations have identified one another as being a collaborative partner. The findings from this sociogram and analysis demonstrate there are only a few organizations within the sample population that have collaborated over the past year. There is a high concentration of collaboration among agricultural organizations (O1, O13, O19, and O20) in comparison to the other types of organizations.

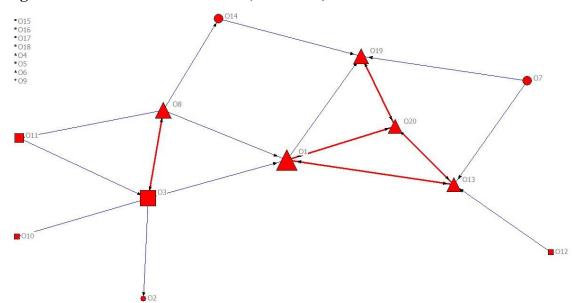


Figure 4.4: Collaboration Network (2012-2013)

Notes: The following symbols represent type of organization: Agricultural "▲"; Community "■"; Environmental "●"

Table 4.8 provides centrality measurements to support the sociogram above. The nodes are sized according to eigenvector centrality measurements; the larger the node, the higher the eigenvector centrality score for that particular organization. The eigenvector centrality data from Table 4.8 indicates there are a number of organizations that are well-positioned in relation to some of the leading agricultural organizations that have regularly collaborated over the past year. This is significant in understanding their ability to gain more access to what may be perceived as some of the leading organizations that are regularly attempting to combine efforts to increase the sustainability of the local food system. In short, the organizations with higher eigenvector scores are in a better position within the network to increase their chances to collaborate with some of the organizations that are already working together.

Another purpose for visually demonstrating eigenvector centrality in the sociogram is to show how the organizations clustered around O1—a prominent agricultural organization

within Marin County—are in a beneficial position to collaborate with other organizations. The peripheral organizations (O2, O7, O11, O12, O14) are most able to take advantage of their connections with the organizations with higher degree centrality. In other words, they will have the opportunity to engage with other organizations connected to their immediate collaborating partner organization. Additionally, agricultural organization O1 is also a prominent actor in relation to total collaborative network when observing its betweeness centrality. Other than O14, it is the organization that links together the total network, and therefore allows for the possibility of bridging ties through diversifying collaboration. More attention is given to O1 due its area of interest and degree centrality as well.

All of agricultural organizations (O1, O13, O8, O19, and O20) scored higher in degree centrality than the other organizations, with the exception of O3. This emphasizes that the agricultural organizations have been most active over the past year in collaborating on local food event within the county, and regarding the other centrality scores, such as eigenvector and betweeness, they are the most strategically located overall. In other words, they have demonstrated more activity in relation to collaboration.

Table 4	Table 4.6: Centrality Measures for Conaboration						
Node	Degree	Betweeness	Eigenvector				
01	5	25.3	0.496				
03	5	21.733	0.366				
08	4	8.267	0.365				
013	4	13.233	0.318				
019	4	7.767	0.35				
O20	3	1.167	0.333				
07	2	1.167	0.191				
011	2	0	0.209				
O14	2	1.367	0.205				
O2	1	0	0.105				
O10	1	0	0.105				
O12	1	0	0.091				

Table 4.8. Centrality Measures for Collaboration

Node	Degree	Betweeness	Eigenvector
O4	0	0	0
O5	0	0	0
06	0	0	0
09	0	0	0
015	0	0	0
016	0	0	0
O17	0	0	0
O18	0	0	0

 Table 4.8 Continued

Although agricultural organizations demonstrate a reciprocal relationship in collaboration ties, there is a lack of networking with other types of organizations. Organizational leaders were asked a set of questions inquiring about why they may or may not collaborate with another organization. The responses are provided in Tables 4.9 and 4.10.

Eighty-eight percent of the respondents agreed or strongly agreed that mission alignment was one of the leading motivators for collaborating with another organization, while 86% of respondents agreed or strongly agreed that they would not collaborate if the mission of another organization is not similar.

	Strongly Agree % (n)	Agree	Neutral	Disagree	Strongly Disagree
a) Missions are similar (N=16)	63 (10)	25 (4)	13 (2)	0 (0)	0 (0)
b) I know one or more people from the organization (N=17)	41 (7)	53 (9)	6(1)	0 (0)	0 (0)
c) The organization has a lot of resources (e.g., financial capital) (N=16)	31 (5)	6(1)	31 (5)	25 (4)	6 (1)
e) Little expected from my organization (N=13)	0 (0)	8 (1)	39 (5)	23 (3)	31 (4)
f) The organization has well-trained personnel (N=15)	20 (3)	53 (8)	20 (3)	7 (1)	0 (0)
g) There is a high likelihood the project will succeed. (N=16)	38 (6)	44 (7)	13 (2)	6 (1)	0 (0)

Table 4.9: Frequencies for Collaborating with other Organizations

Mission alignment is of primary interest for this research to help support a clearer understanding for the barriers for establishing a collective identity among local food system advocates. During Phase II research I asked participants a set of questions about their points of view regarding sustainability as it relates to food system and their organization's role within the food system. The following quotes describe some insight to how participants (n=7) view their organizations, as well as their perception of sustainability in general. The majority of organizations described sustainability in relation to the sustainable development definition by the World Commission on Economic Development: "Development which meets the needs of current generations without compromising the ability of future generations to meet their own needs" (WCED 1987):

"Sustainability means that you are not using more resources than you can renew. They system is not overused and it can continue to prosper. In the food system, it goes farther than that. In a general rule, it is how the soil is managed, how productive [it is], to be more of a locavore, and [know] how the toxins get into food, and how far the food is trucked. Not excessive use of fossil fuels..." –O14

"Living within our means, which relates to our natural resources. Not producing more waste than nature can absorb. Sharing. Not because we got there first or because we can pay the most, or take the most, we should share with others. [Don't] impact the environment in a way that you are taking more that can be replenished for future generations." -O8

However, there were a few organizations (n=3) who shunned the term for its perceived overuse in the field, the lack of ability for sustainability to be realized or the term's shortcomings:

"My first introduction to sustainability was the three-legged stool and the Bruntland definition of balancing the three areas, social, environmental, economic...and taking what we need from the land now in a way that doesn't impact future generations. Since then, I've really tossed out sustainability from my language because I feel we are at a place in terms of our relationship with eco systems, and in this country and culturally, sustainability isn't going to cut it. We need to go for something much deeper than just an impact neutral approach." –O15

"I hate that word. It's just such an overused...it doesn't mean much. Sustainability to me right now, because I have assumption that all of our farmers have sustainable practices on their land, they are at the highest level already. My main concern is their financial sustainability. That's hard for them because we have a food system where consumers believe food should be a dollar...so changing that mindset within the consumers, to have this kind of quality of food, to protect our land and our food costs a little more and it's worth it. It's worth these guys making that money. So that's what sustainability means to me the most." –O1

The feedback offered provides some additional insight for why mission alignment was key for collaboration, and additional rationale for why organizations may not collaborate, which may be connected to their philosophical differences. However, participants also did not consider their organizations as directly connected to the food system. Phase II data reveals that it may be an issue of identity for why organizations may be less apt to collaborate. First, half of the participating organizations (n=5) do not view their missions as directly contributing to the increased sustainability of the local food system:

"Well, we don't have a lot of projects directly related to the local food system, but we do work with [a number of environmental organizations], but not necessarily directly related to the food supply... We don't [have a role in the local food system] other than looking at land use and environmental impacts." –O9

This quote demonstrates how one participant working for one of Marin's environmental organizations perceives the food system as being linked primarily to the production of food. As a result the sustainability component of environmental stewardship, such as the preservation of natural resources like water, viable farmland and urban/rural landscapes to serve the needs of a more sustainable local food system is overlooked. However, it should be noted that some non-agricultural organizations have collaborated with agricultural organizations on local food projects in the past. For example based upon the analysis of collaboration within the sociogram (Figure 4.4), O14 has collaborated with O19 and O8 during the previous year, while O7 has also worked with O19 as well as O13.

The willingness to collaborate with another organization increased if participants had familiar ties to another organization. This is demonstrated when reviewing the sociograms and accompanying output from the strong ties and collaboration networks (see Figures 4.3 and 4.4). In particular the higher degree centrality scores for both networks find there are more individuals from the agricultural organizations that are working together. These findings are also expressed in survey data where 94% of the participants agree or strongly agree that knowing one or more people in another organization will increase their likelihood for collaborating with that organization(s). However, when this question is asked in a different format, over a quarter of respondents (29%) disagree that they would not collaborate with another organization because they do not know a person from the other

organization. Almost half (43%) reply that they are neutral about the factor of not knowing another person in the organization. When participants were asked why organizations may not be willing to collaborate, the common response revolved around availability of resources, such as time, money and human capital. More than a third (37%) either agree or strongly agree that another organization's available financial resources will encourage their willingness to collaborate with that organization(s), while half of participants (50%) agreed or strongly agreed they would not collaborate with another organization if that organization were not financially secure. Seventy-three percent reported a higher likelihood for collaboration if the organization(s) have well-trained personnel, while 62% replied they agree or strongly agree that they would not collaborate if the other organization(s) lacked welltrained personnel. Fifty-four percent disagreed or strongly disagreed with the statement that they would only collaborate with another organization if there is "too much expected from their organization". However, nearly three quarter of the respondents (69%) reported they would not collaborate if "too much was expected" from their organization. For the last statement, which asked participants if they would collaborate if there is a "high likelihood the project will succeed", over three quarters of the respondents (82%) agreed or strongly agreed. Similarly, almost three quarters of respondents (70%) agreed or strongly agreed they would not collaborate if they felt a project would not succeed.

Findings here may be related to trust. Each participant in Phase II interviews agreed that resources are already limited, and therefore there must be mutual investment in the expected outcomes for the project at hand. Furthermore, all participants expressed the sentiment for a need to trust other organizations to be transparent in their role and objective in collaborating. In other words, people must come to the table with the intent to provide an

equal share of resources in order for a project to move forward. The following comment describes the overall sentiment:

"Well, you probably hear this all of the time. Competition for resources. You always wonder, 'Am I in competition with that organization for the same [funding]?' I think staff time, funding models for staff, severely get in the way, well, they create senses of competition, and they get in the way of people's ability to be present."

-013

"Personalities, honestly. It can be one of them. That's more in the past that I've seen that. It can be projects where you are trying to put in a lot of time, and this is my own perspective that I've seen, and you are trying to put in a lot of time and everyone has differing views about what they want to get done. Nobody has the perfect common goal. For example, our focus is [in one area of the local food system]. [Another organization] might be, and we work well with them, but their focus is [different than ours]. In the past, that was a point of contention. Years ago, they were like, 'you should only be supporting [a particular local food initiative]' and we felt 'no', we wanted to [only focus on our work]. There is only so much time, and you have to stay really focused on your own mission for whatever that is, and so sometimes it is hard to take out that extra time to really work long and hard on extra projects." –O19

The above comments contribute insight to some of the barriers to collaboration. In addition to resource limits, mission alignment is critical. If these are some of the main barriers to collaboration, then the question turns to, what would increase the opportunities for collaboration to ensure a more sustainable local food system? The following quote provides insight into how many participants perceive opportunities for increased collaboration. There

appears to be recognition that there is room for improvement in regards to collaboration for a more sustainable food system to be realized:

"There needs to be a convening of likeminded organizations to have them problem solve together. It gets back to wise strategic planning. What's our mutual goal and what's each of our roles in accomplishing and achieving that? [We all play a different role], but one is not familiar with the role the other plays. What is the long term effectiveness?" –O1

	Strongly Agree % (n)	Agree	Neutral	Disagree	Strongly Disagree
a) Missions are not similar (N=14)	29 (4)	57 (8)	14 (2)	0 (0)	0 (0)
b) I do not know anyone from the organization (N=14)	7 (1)	21 (3)	43 (6)	29 (4)	0 (0)
c) The organization does not have enough resources (e.g., financial capital) (N=14)	7 (1)	43 (6)	36 (5)	14 (2)	0 (0)
e) There is too much expected from my organization (N=13)	15 (2)	54 (7)	31 (4)	8 (1)	0 (0)
f) The organization does not have well- trained personnel (N=13)	8 (1)	54 (7)	31 (4)	8 (1)	0 (0)
g) There is little chance the project will succeed (N=13)	31 (4)	39 (5)	15 (2)	8 (1)	8 (1)

 Table 4.10: Frequencies of Reasons for Not Collaborating

Summary of Findings

Centrality measurements provide some initial evidence of social capital among a number of agricultural organizations, while it may be lacking among the majority of the organizations in the whole network. Strong network ties, collaboration, reciprocal exchanges, and information channels indicate the presence of social capital. Findings here also demonstrate there are opportunities to build social capital by bridging network ties with organizations that are not strongly tied. Data derived from both Phase I and II demonstrate these same agricultural organizations perceive one another as being leaders in the county in regards to a more sustainable local food system. As a result, the data suggest there may be an association between the social capital shared among these organizations, and their collective identity. In addition, the findings show there may be an absence or lack of collective identity as organizational leaders from non-agricultural organizations have acknowledged they are not a part of the sustainable local food movement. These organizations do not readily collaborate with agricultural organizations, and vice versa. This would occlude them from the boundary specification of a collective identity shared with the agricultural organizations. It must also be noted that higher centrality measurements in relation to collaboration, strong ties, leader organization perception, and information channels may be related to propinquity. Although not all the agricultural organizations are clustered in one area of the county, they have been working to support agricultural practices in the county for decades. This work has enabled them to interact around agricultural issues more frequently than others, which may have aided the development of their boundaries identification in relation to other organizations. In addition to boundary identification, the fact that non-agricultural organizations do not view their organizations as being a part of the local food movement may be inferred as a question of consciousness or awareness of the breadth of the social movement (Gerson and Peiss 1985).

The selection of 'leader organizations' by both non-agricultural and agricultural organizations within the local food movement resulted in higher centrality measurements of agricultural organizations in this category. This information may be interpreted as a collective identity among agricultural organizations as they see themselves as being not only a part of the local food movement in the county, but as leaders of this movement. On the

other hand, there may be a lack of collective identity among non-agricultural organizations as they do not see how their missions relate to the local food movement, and thus have not selfselected their own organizations, nor those that are typically non-agricultural in scope of mission. As a result, the perceived lack of a collective identity among all participating organizations reduces the means for establishing a master frame to enable collective action to address the multiple grievances facing the local food system. The above findings lend support the first expected observation: *Lower levels of collective action among organizations in the local food movement are associated with a lack of collective identity*

Findings also reveal that bridging and bonding social capital may play a role in the establishment and maintenance of a collective identity among organizations. Cross-sectional findings reveal that there are a few agricultural organizations that have collaborated, demonstrating collective action, while other organizations are not readily acting collectively to address local food movement issues. The descriptive statistics and Phase II interviews suggest one of the main issues for preventing organizations from adopting new information from other organizations is due to limited resources. Furthermore, there was reluctance for collaborating with other organizations if their missions were dissimilar, they lacked resources, there were limited personal relationships, and the perception that a project would fail. These are all issues of trust as it relates to taking the chance and bridging relations. Moreover, trust is inherent in social capital and may act as a barrier among the high concentration of bonding social capital shared among the organizations who perceive themselves and others as leaders. More concisely, this may be an issue of competence trust as discussed by Das and Teng (2001) where individuals and organizational leaders may not trust another due to their perception of the other's competence and thus ability to contribute to the

shared goals of the network and partners. The higher centrality measurements of strong ties, perceived leadership, and reciprocal relations among these organizations denote tendencies toward bonding social capital and what may suggest competence trust. Groups with bonding social capital may limit the bridging of network members, which will reduce the ability of diffusing and gaining new information (Portes 1998).

Additionally, the lack of consciousness (awareness) among non-agricultural organizations of the breadth of the local food movement and their role in the movement may limit their willingness to establish ties with other organizations. The lack of consciousness may be related to a lack in the general consensus about what sustainability is and its relation to the local food system entails. Phase II data revealed there were a variety of interpretations of sustainability and the direction that organizations need to be taking in addressing the sustainability of the local food system. Agricultural organizations were, at the very minimum, in agreement that sustainability related to the well-being of the production aspect of the food system. This consciousness is coupled with the selection of leader organizations denoting a boundary around the agricultural organizations-the perception that nonagricultural organizations are not leaders in the movement appears to limit bridging between non-leader and leader organizations. These findings therefore also lend support for my second expected observation: Lower levels of collective identity among organizations in the local food movement are associated with lower levels of bridging social capital. Due to the exploratory nature of this cross-sectional research these findings are strictly preliminary. However, there does appear to be adequate evidence to infer the findings are relative to the expected observations for this research. These areas will be revisited in the discussion and conclusion in Chapter 5, and connected to the literature review to demonstrate

the contribution of this research to the local food movement literature. Chapter 5 will then turn to a discussion of the limitations of the research, suggestions for future research, and recommendations for organizations to increase their potential for collective action to address local food movement grievances.

CHAPTER 5: DISCUSSION AND CONCLUSION

In this chapter I will discuss the relevance of Phase I and II findings to current research in the local food movement. This chapter will reinforce the conclusions established in the previous chapter while also arguing for how my findings build upon prior research and provide the foundation for future research. I have arranged the following discussion thematically. The themes to be revisited are: collective identity, bonding and bridging social capital, and social movement framing. The chapter will then turn to the concluding remarks for this dissertation, which lays out the limitations, suggestions for future research, and recommendations for Marin County organizations.

Collective Identity in the Local Food Movement

Scholars recognize that successful social movements are characterized by a shared identity–a collective identity–among members (Polletta 2010). Likewise, local food systems researchers have also expressed the need for a shared vision to address the mounting grievances related to the social, environmental, and economic aspects of the food system (Stevenson et al. 2007; Glowacki-Dudka et al. 2012). To achieve this, a collective identity is necessary, which is supported by actor similarity within the network (Brass et al. 2004). Actor similarity is denoted by the homophilous relations among actors where similar backgrounds and interests attract one another, forming a network of relations for a common purpose (Degene and Forsé 1999; Kadushin 2012).

There are three types of organizations that are examined in this research: agricultural, environmental, and community outreach organizations. Each plays their own special role in increasing the sustainability of the local food system. Analysis of the cross-sectional data

show the difficulty in establishing a collective identity given the diverse missions of these organizations. As the findings reveal, some organizations within the local food movement in Marin County share a common identity. This collective identity among a few of the agricultural organizations appears to be based upon their patterns of networks as indicated by centrality measures, and reciprocal nature of their relationships. Furthermore, their collective identity may be based upon their perception as leader organizations and ability to strengthen the sustainability of the local food system. Based upon Phase II data, this is a sentiment shared by agricultural organizations, as well as the non-agricultural organizations in this study. Social movement researchers agree the presence of leaders within a social movement is necessary for developing a collective identity (Benford and Snow 2000). However, scholars also agree that a leader organization(s) can also be potentially problematic (Snow 2007).

The potential issues that may arise, is a deference toward the roles the agricultural organizations are playing in the county, which may limit the incorporation of a more collective approach for social change. This deference is shown by the perception of agricultural organizations as the leading organizations, which may imply they are viewed as experts on what a sustainable food system should "look like". On the one hand, findings indicate leader organization(s) have the opportunity to develop collective identity that encompasses a number of grievances of the conventional food system. But on the other hand, data infers that collective identity does not appear to be more inclusive to address the multiple areas of the food system, which leaves little opportunity for expanding collective action for social change on a larger scale, i.e., addressing multiple needs within the local food system by including more organizations at the table. These initial findings demonstrate there

is a disconnect in perceiving one's organization as contributing to the local food system if they are not directly related to food production. These findings align with the theoretical approach for analyzing collective identity as a boundary appears to be present regarding who is a "player" in the local food system, as well as the overall awareness of non-agricultural organization's roles (Gerson and Peiss 1985). As a result, my research has infers the identification of two barriers for establishing a collective identity in local food systems work. In short, there seems to be an association between perception of one's role, as well as the perception of "leaders" and the ability for collective identity to form among local food system organizations. However, a longitudinal study of these associations is necessary.

Organizational Characteristics and Legitimacy

Findings in Chapter 4 have provided additional support for what current social movement research has found as necessary for developing collective identity and subsequent collective action. Organizational characteristics such as capital resource, along with movement grievances, and collective action frames help provide legitimacy, and align constituents and potential members to support and join an organization (Cress and Snow 1996; Passy and Giugni 2001; Edwards and McCarthy 2007). In addition, the characteristics of leaders and individuals working within the organization aid recruitment and perception of a legitimate organization and collective action frame (Passy and Giugni 2001). However, organizational characteristics depicted in Phase I findings do not necessarily reveal agricultural organizations as having an advantage over other organizations examined. For example, it does not appear the organizational characteristics, such as economic capital, nor individual characteristics, such as education were significant in developing social capital, nor determining collective identity. Each of the three types of organizations appears to have

similar access to resources in relation to economic and human capital. Two differences that seems to separate the organizations is the perceived importance and therefore legitimacy of the organization in relation to long-term presence in the county, and mission. Even though environmental organizations have a higher median long-term presence in the county at 28.5 years, the Phase II respondents still reported the importance of long-term presence of the agricultural organizations. In this case, even though agricultural organizations have not been present as long as the environmental organizations, respondents were still more likely to report the longevity of agricultural organizations. This may be inferred as another indicator for establishing a collective identity around the local food movement. Their responses couple with the responses revealing the perception of leader organizations in the movement, which were considered the agricultural organizations. In short, they do not initially think of environmental organizations as participants in the local food movement. This may help explain why respondents do not initially think of environmental organizations when discussing the importance of longevity in the county as well. Here, the mission and perception of the organization may be more significant in this case as individuals identify the importance agricultural organizations with the advancement of the local food movement. This is ever more important to understand when discussing the development of a collective identity in the county around local food systems and addressing the grievances in the local food movement. If agricultural organizations are perceived as the "go to" organizations to help community members become more involved in the movement, these organizations will have a greater opportunity to shape a collective identity around local food issues. When a collective identity is developed, collective action may ensue toward the shared grievances. The caveat here is whether those shared grievances take into account the variety of

sustainability issues existing in relation to the conventional food chain. It is important to understand the diversity of a sustainable local food system, and various actors and organizations that can contribute. However, if the agricultural organizations are perceived as more legitimate "players" in the movement, the move toward increased sustainability may be slowed. If only certain issues along the food chain are given attention, while others, such as environmental or community issues are receiving less emphasis, there will be an imbalance. This perception of legitimacy can partially be explained by observing the cultural values of the county. Parsons (1960) and Scott (2009) observed the importance of cultural values as determining what an individual and groups deem legitimate. Therefore, legitimacy of an organization within a community is dependent upon its ability to align with the values of the people in the community. For this research, the population of organizations embedded within Marin County, a historically agricultural county, may perceive the agricultural organizations as more legitimate and thus capable to address the local food system, which they determine as an agricultural issue. Prior local food research has yet to identify the perception of legitimacy as it relates to the above areas of the mission and long-term presence of organizations as indicators for establishing a collective identity. However, testing and retesting of these initial observations through longitudinal research will be necessary to declare definitive results.

Networks

Information Networks

Interviews and survey data derived from organizational leaders in Marin County have revealed that one of their main channels of communication and information exchange is word of mouth (71%). Phase I data revealed that when participants engage with outside

organizations, such as leaders establishing membership or acting as a board member in other organizations, they are doing so with agricultural organizations more frequently than any other type of organization. The significance of analyzing the networks of organizational directors, with whom and which organization they are connected, is to understand how collective identity around the agricultural component of the local food system may develop. This interpersonal interaction among organizational leaders may be yet one more indicator detailing an association of an organization's likelihood to establish a collective identity that aligns with the mission of agricultural organization(s). According to Melucci (1989) and Goodwin et al. (2007), the resonance of the organization's message regarding how they frame the movement and collective action will affect perceived legitimacy and subsequent support for the organization(s). In the context of this research, the organization's framework may be diffused through individual networks of those leaders initiating membership ties with other agricultural organizations. Their extended networks may potentially act as conduits that can aid recruitment and support for the agricultural organization(s) and their framework as it relates to the local food system (Passy and Giugni 2001). These observations become more significant when considering that the membership in agricultural organizations among the environmental or community outreach organization participants does not appear to be as significant as the shared membership among respondents already working within agricultural organizations. In short, there were more established relationships and shared memberships among likeminded organizations than among any other type of organization.

The importance here is mainly to draw attention to what appears to be an association between the diffusion of communication and forming a collective identity that is specific to the framework of agricultural organizations. Enhancing communication among and between

non-agricultural organizations may be necessary in order to form a collective identity that addresses the multitude of components that will move local food system toward increased sustainability. The benefit of interacting with other organizations as board members, volunteers, and more is the ability to learn from their work and develop new ideas for their own organization. However, findings reveal that agricultural organizations tend to stick together versus branching out into other organizations. Previous research supports this phenomenon when looking at why individuals and their organizations may not choose to network with others as there is not a relative advantage for incorporating another's practices or ideas into their program (Benford and Snow 2000; Soule 2007). On the other hand, social movement scholars and network scholars alike recognize the benefits of incorporating new information into highly bonding networks, such as the agricultural organizations (Soule 2007; Granovetter 1973). It is especially important to infuse the movement and its organizations with new ideas to avoid redundancy. There is evidence of bridging ties outside the interorganizational agricultural network, for example O13, one of the lead agricultural organizations is actively seeking outside information. Although the type of information that is acquired from outside organizations was not revealed by O13, acquiring information from outside the county is beneficial for those organizations directly linked to organizations such as O13. It is not understood if this new information regularly benefits the food system as a whole, or simply reinforces some of the work already being done among leader organizations. Ideally, the new information, even if it does not readily address the immediate needs or framework of an organization, there is a chance to combine or reform the ideas for the organization and its network (Koopmans 2007). This is one of the main interests in determining the current interactions taking place among organizational leaders, as well as

their willingness to collaborate and seek new information from other organizations. All of which help to understand where collective identity and subsequent collective action may be concentrated, and how it may diffuse throughout the county. These are necessary components for designing a more encompassing framework among organizations to address the local food movement.

Network Ties

My research in Marin County has revealed that having strong connections, such as friends and family, may determine organizational leaders' willingness to collaborate. Two of the top reasons organizational leaders would choose to collaborate with another is a) the missions are similar (88%), and b) they know one or more people from the organization (94%). Social movement researchers have found that likeminded individuals will work together when their personal perspectives about a particular shared grievance are aligned (Vago 2004). Although the willingness to work together may not be directly related to strong ties, research has found that individuals are more likely to be influenced to join a movement or cause when they trust another person that is already a part of an organization and social movement, such as a close friend or family member (Passy and Guigni 2001). The importance here is the current ties among network members that are considered strong, will enhance the opportunity for diffusing information that can influence one another's perspective about the movement grievances and how to address them. Social network analysis from Chapter 4 found there is a relationship among family and friendship networks, and collaborative ties, primarily when the degree centrality measurements are observed. The association observed was the higher degree centrality scores among agricultural organizations in relation to collaboration as well as friend/family ties. This may provide some insight to our previous discussion about membership patterns among agricultural organizations, as well as associations between social capital, collective identity, and collective action.

Family and friendship ties are considered strong ties and demonstrate a tendency of favoring similar organizations. In this network analysis, agricultural organization held the highest degree centrality by sharing the most connections among family and friendship networks with other agricultural organizations. As was observed earlier, agricultural organizations are actively working at increasing the sustainability of the local food system, but there may be a gap in the perception that non-agricultural organizations' actions align with their own, or others within their network. Therefore, determining the strong ties of family and friends, and understanding the higher degree centrality for this measure is concentrated among agricultural organizations, may demonstrate the likelihood for closed-off networks, or bonding social capital. In short, knowing another person in an organization will increase the likelihood of engaging with that person's organization. The idea that strongly tied individuals and their organizations are aligned, is both promising and a detriment for the local food movement. On the one hand these relationships may encourage collaboration. On the other hand, with limited interest in expanding communication networks into organizations outside their area of interest reduces new, innovative ideas from forming. As a result, there are limited opportunities for organizations to bridge new relationships and develop social capital. Furthermore, the closed-networks reduce the likelihood for developing a more encompassing master frame that can address the multiple grievances of the conventional food system. This aspect of strong ties may be a signal of the negative effects of social capital as outlined by Portes (1998).

Collaboration

Social movement scholars and organizational theory scholars have documented some of the necessary elements for collaborating, in other words, collectively acting together, or collective action. In particular, the establishment of trust enhances the ability and willingness of two or more organizations to collaborate and support one another (Das and Teng 2001; Goodwin et al. 2007). Collaboration here is a measurement of collective action. The collaborative ties observed in Chapter 4 were most prominent among the agricultural organizations. These same organizations also demonstrated higher levels of social capital (trust) in relation to strong ties, and concentrations of collective identity, both which are presumed to be associated with higher levels of collaboration (collective action) among organizations in this network. Goodwin et al. (2007) would find the presence of trust and the subsequent collaborative efforts evolving from a shared collective identity. In addition to the strong ties exhibiting trust, the presence of trust can be related to what Das and Teng (2001) referred to as good will trust and competence trust. The majority of organizations were unwilling to collaborate and bridge into relationships with other organizations if their missions were not aligned. The agricultural organizations were more likely to collaborate, as well as select other agricultural organizations as leader organizations, which may be attributed to mission alignment. Based upon the mission of the organizations and the higher frequency of collaboration among likeminded organizations, there may be evidence of competence trust (Das and Teng 2001). These observations are based upon the observations of Das and Teng (2001) which found that if an organization is not competent in a desired field, there is less likelihood for other organizations to seek out collaborative efforts. Based upon what I have observed in Phase I and II data, organizations in the local food movement

hold similar patterns of behavior and sentiment. In addition to the network analysis that found collaboration taking place mainly among agricultural organizations, findings from the survey reveal that respondents reported they were less likely to work with someone outside of their areas of expertise. This is a potential issue for realizing a more sustainable local food system as it may be revealing the reluctance to fully understand the intricacies of the food system. Furthermore, reluctance to collaborate directly reduces the ability to share resources and information.

Collaborative ties may also be the result of good will trust (Das and Teng 2001). There is a concentration of agricultural organizations working together, which many of them have similar missions and therefore an increased capacity to trust the collaborative partner will fulfill their role in the collaborative. The reciprocal relationships observed in both the collaborative and leader networks also find that there is a shared history between the agricultural organizations. This may support Das and Teng's good will trust theory that there will be higher levels of trust and collaboration if organizations believe the other organization is not partnering in self-interest. Prior local food movement research has not clearly identified mission alignment as a main barrier for collaboration. However, these observations are only inferences due to the cross-sectional nature of the research. I must reiterate that a more longitudinal study is necessary to determine the validity of these initial findings. Therefore, these initial findings provide the necessary inferences for establishing a foundation for future research in this area. Additional research warranting more attention is the relationship between social capital and barriers to collaboration in the local food movement.

Social Capital

Trusting relationships between individuals and organizations can be facilitated due to the nature of highly bonding networks that attempt to ensure self-interest does not interfere with the interest of the greater good of the whole (Coleman 1988). Based upon the descriptive statistics and centrality measures, data reveals respondents are opting to collaborate with people they know, as well as with those organizations with similar mission. Although I cannot conclude there is a definite relationship here, there may be enough evidence to support the notion that trust is highly related to mission alignment and familiarity with the organization's personnel. Furthermore, there is evidence here of norms of reciprocity that suggest the presence of bonding social capital. Agricultural organizations were more likely to collaborate with one another over the past year, as well as express a perception of those same organizations as leader organizations in the local food movement.

Trust may also be likely to develop in relation to organizational characteristics. Time established in the county working on a particular mission, as well as the amount of financial and human capital help support the perception of a legitimate organization, which resonates well with constituents and helps gain trust (Cress and Snow 1996; Edward and McCarthy 2007). Another indicator of trust is the observed relationship among leader organizations seeking information from other organizations with mission alignment that may help improve their strategies and ability to achieve goals. Diffusion and adoption literature supports the strength in social networks for connecting with other likeminded individuals and organizations to realize these goals (Soule 2007). The data derived from the centrality measurements of information channels and the descriptive statistics detailing adoption of new ideas demonstrates a higher likelihood of adoption if ideas are applicable to the

organization. These data are important to understand for their ability to identify those organizations that appear to be the most trusted within the network, and subsequently share collective identities. Thus far, local food movement literature has not documented the rationale for organizations to choose to adopt new ideas from other likeminded organizations. Nor is there documentation about the lack of effort to adopt new, innovative ideas for enhancing their work. Most notably, there is a lack of discussion regarding the role trust and social capital plays in determining these choices. However, longitudinal research is needed to verify these initial observations. Moving the discussion one step further toward investigating social capital, I now continue with the relevance of bonding and bridging social capital in this research.

Bonding and Bridging Social Capital

Social capital research supports the pros and cons of bonding and bridging social capital (see Putnam 2000). Bonding social capital for the purpose of this study is inferred as one of the precursors for the development and maintenance of collective identity, which is essentially a homophilous network of individuals and their organizations. Furthermore, these components of social capital, and collective identity are necessary for the designing and execution of collective action. In short, these individuals and their organizations share common values about their organizations' missions, and which target populations are to be addressed by developing relevant collective action frames. As discussed in the literature review, 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). However, collective action frames can be narrow and non-inclusive of others that are not necessarily connected to the organization and its immediate network. This

is one of the caveats of bonding social capital (Portes 1998). My research supports this phenomenon of bonding social capital among organizations working within Marin County's local food system. The analysis of my data from Phase I detailed some of the preferences among organizational leaders to work more closely with organizations that have similar areas of focus, for example the primary agricultural organizations discussed thus far. Furthermore, respondents have expressed greater interest in working with organizations if they already know someone from another organization.

Based upon findings from this research, there are still gaps for social capital to be bridged. Glowacki-Dudka et al. (2012) have observed that a lack of trust and divided goals among local food advocates slows the bridging of social capital to form new collaborative relationships. However, their analysis did not take into account the interorganizational dynamics, such as collective identity, as a barrier to bridging social capital. Flora and Flora (2008) argue that communities can build sustainable social capital through strengthening relationships and communication community-wide by encouraging community initiative, responsibility, and adaptability to constant changes. Bridging social capital was not expressed in relation to organizations within the local food movement, but their community analysis is ever-more relevant to the discussion of building trust and adapting to the differing missions present among organizations. It is the bridging of social relations for the realization for a more sustainable local food system—a community-wide initiative to be explored—for the betterment of the community. Putnam (2000) explained how social capital is the connection or reciprocity among people, which enables the formation of social networks to effect community change. He states, "Social movements also create social capital, by fostering new identities and extending social networks" (Putnam 2000:153). However, if

there is a lack of trust due to the perception that other organizations and their personnel are not "in it for the betterment of the whole" then there is little opportunity for the extension of networks and for social capital to manifest.

Fostering new identities and extending social networks are an advantage for the local food movement, especially when human capital can be harnessed from realizing social capital via extending beyond the bonding social capital that reduces trust, and bridge into other areas of the network. However, I am not suggesting the elimination of bonding social capital. On the contrary, much like establishing sustainability for communities as a whole, organizations working toward a more sustainable local food system need to consider balancing the bonding and bridging social capital to realize long term success. Flora and Flora (2008) explain that, "Communities lacking bonding or bridging social capital also lack the capacity for change." (p. 127). This can be translated to organizational leaders, much like community leaders, where the former can utilize both bonding and bridging social capital to create a more collaborative social environment. This will enable the utilization of available human capital and available capital resources for a collective identity.

Bridging trusting bonds with organizations previously disconnected may ultimately improve the sustainability of the local food system. Bridging social capital does not come without challenges. Over the course of the interviews, and during my research of Marin County's history, it became apparent that the difficulty for organizations to form a collective identity to act together for a more sustainable food system is prevalent. However, the very nature of working for a more sustainable food system requires that organizations and various stakeholders are able to communicate and find a common ground (Jarosz 2000; Stevenson et al. 2007).

Master Frames and Collective Identity

The main question for this research is, How does social capital affect the interorganizational dynamics for establishing a collective identity to support the local food movement? One of the main revelations from my research is the seemingly lack of coordination of framing, which is necessary for a collective identity to manifest and provide subsequent collective action (Benford and Snow 2000). The lack of coordination can be partly attributed to the lack of resources available, such as time and money. The main factors that appear to demonstrate an association affecting a collective action appear to be related to those limiting the development of a collective identity: perception of leaders, and selfidentification of organization's role in the local food movement. These findings support associations related to the primary proposition for this exploratory research, which states: Lower levels of collective action among organizations in the local food movement are associated with a lack of collective identity. The fragmentation of areas of focus in the local food movement is well known (Stevenson et al. 2007; Glowacki-Dudka et al. 2012), and my research has built upon their previous findings to reveal that organizations are also unable to collaborate efficiently due to divisive frames. Analysis of Phase I data and subsequent conversations with participants during Phase II, supports initial findings that a collective action among the whole network appears to be absent. The inferred collective action that was observed is concentrated mainly among the agricultural organizations. The main indicator for determining collective action among these organizations is the centrality measurement of collaborative relationships over the past year. Collective action may be possible due to the shared collective identity among these organizations. This apparent collective identity, however, does not appear to be universally shared among all network actors. The

fragmentation of focus is expected due to the multitude of areas within the local food system, but there is little effort to form a collective identity about what a sustainable local food system encompasses. Without a collective identity there is little chance for collective action to be realized for the whole network.

In conjunction with the first expected observation, findings from this research also support prior work that identifies social movement organizations effected by bonding social capital (Edwards and McCarthy 2004). However, there has been scant research into how social capital may deter collaboration among organizations working within the local food movement. Of primary interest is why bonding social capital is the primary form of social capital and why the absence of bridging social capital is prevalent among organizations. This is of primary interest due to the complexity of the local food movement. As previous researchers have identified (see Stevenson et al. 2007), there is a need to increase the weaving of ideas and practices among organizations and local food stakeholders to ultimately develop a master frame (Benford and Snow 2000). This absence of bridging social capital inherently affects the ability for organizations to come together and form master frames. As observed in the social network analysis, there are dense networks of bonding social capital, primarily among likeminded organizations. Likewise, there is less bridging among organizations that are not aligned in relation to their organizational focus, which reduces opportunities for sharing and diffusing frames that can help form and support collective identity. The perceived lack of forming a collective identity may therefore be connected to a lack of bridging social capital, which supports the association outlined by my second expected observation for this study: Lower levels of collective identity among organizations in the local food movement are associated with lower levels of bridging social capital.

Without the possibility for bridging social capital, there is little opportunity for developing a master frame. The master frame for the local food system is ultimately a collective action frame that encompasses the goals and strategies that addresses the multiple facets of the social movement (Benford and Snow 2000). For the local food movement, a master frame would encompass the rich variety of social, economic, and environmental components of the food system. My research has provided some evidence that developing a master frame may not be as feasible due to differing missions and interests. Ultimately, these differences can result in frame disputes. These disputes are essentially disagreements about which framework for collective action is most relevant for addressing change (Benford and Snow 2000). Findings from this research describe the presence of bonding social capital that appears to prohibit organizations from expanding their collective identity boundaries and engage other organizations working within the local food movement. As a result of bonding social capital and fragmented areas of focus, frame disputes among organizations are more likely to occur (Snow 2007). Disputes may be the result of a concentration of trust among a particular group of organizations that is not extended to others due to a disagreement surrounding identity and what the local food system in Marin should 'look like'. As a result, organizations may be slow to bridge social capital into other areas of the food system in order to achieve the holistic model of sustainability that is required for a local food system to thrive. However, it must be noted that more research is needed in clearly identifying frame disputes, as the above factors are inferences based upon prior literature and initial findings from this research.

Conclusion

The aim of this dissertation was to establish a better understanding for how social capital may affect the network of organizations working with the local food movement. The local food movement is one of the many sub-movements categorized under the umbrella of alternative agri-food movements. However, the local food movement shares a number of alternative agri-food initiatives to address the dominant, industrial food system ubiquitous to the U.S. and the global market (Allen 2010; Star 2010; Glowacki-Dudka et al. 2012). Food system research emphasizes the value of addressing the social, economic, and environmental deficiencies of the industrial food system through collaborative relationships among local food system advocates. Collaborative efforts have been seen among producers and consumers, for example (see Glowacki-Dudka et al. 2012), but efforts are lacking among organizations (Stevenson et al. 2007). What has not been thoroughly discussed is why organizations working within the local food movement may not be working together. This research has demonstrated that organizations working within the local food movement in Marin County may not be working together due to an apparent lack of collective identity. These inferences are the result of observing data collected during this research, which suggests a lack of collective identity limiting the formation of collective action to address local food movement grievances. The lack of collective identity has been traced to the established boundaries, and overall awareness of the breadth of the local food movement. Agricultural organizations share a bonding social capital demarked by reciprocal, strongly tied, homophilous relationships, while non-agricultural organizations do not readily perceive their own relevance in the local food movement. Furthermore, this is supported by the fact that framing the local food system is primarily dominated by agricultural production, and

does not seem to readily take into account the various roles of organizations with a lesser degree of agricultural emphasis. One solution would be for organizations to bridge into other organizational networks and to consider the intrinsic value of harnessing the diverse values of neighboring organizations. However, to achieve the development of a master frame would require an increased level of trust among partnering organizations (Snow 2007), requiring increased efforts to bridge relationships. Bridging social capital among organizations in this study was limited due to a lack of resources, unwillingness to collaborate related to a lack of familiarity with outside organizational members, and perception of success related to a project. Furthermore, a lack of bridging can be attributed to the perception of leader organizations, and personal perception of non-agricultural organizations as having a role to play in the local food system. Due to the lack of perceived connection to the food system held by organizations, such as those working within the community outreach and education, or the environmental sectors, there are gaps to be filled. These gaps represent a lack of a holistic vision among organizations, and a lack of bridging social capital, which creates barriers to building a collective identity and master frame to enable a more sustainable local food system in Marin County.

Limitations of Research

As with every social network research and analysis, there are some caveats to consider. One of the potential drawbacks for this study is the response rate and missing data in Phase I. Social network analysis researchers warn about the possibility for lower response rates and subsequent missing data in surveys due to similar issues related to attitude and opinion surveys (Scott 2009). Missing data is also common in social network research, and can be attributed to a number of issues such as respondent fatigue and boundary specification

(Prell 2012; Scott 2009). To address these shortcomings I triangulated data by incorporating a qualitative component in Phase II. Prior network analysis research has suggested this approach as a means to increase the validity of findings (Prell 2012). Finally, due to the cross-sectional nature of the study, generalizability into other regions and social movement organizations cannot be determined. Marin County is also somewhat unique in relation to its agricultural and environmental advocacy history, which may prove difficult in comparing Marin networks to other counties in the U.S., and global regions. Furthermore, Marin County's proximity to San Francisco and other bay area communities may also cause variability in the findings due to the influence of the size of markets, access to non-profit organizations, academic institutions, and a diverse, multicultural population.

Suggestions for future research

This topic will benefit from future researchers addressing the methodological shortcomings of this study, namely conducting a longitudinal to increase the generalizability of findings. Researchers and organizational personnel will also want to control for some of the key variables discussed above to improve understanding of the changing variability among networks at a regional, national and international scale. This will also increase the validity of findings, and ultimately the generalizability, which can ultimately support advocacy efforts for forming collaborative partnerships. Additionally, researchers should be to seek out the methods for accomplishing what Stevenson et al. (2007) recognized as the need for organizations to weave together differing collective action frames to develop a master frame. Researchers will want to examine the processes organizations have taken to develop master frames, and ultimately the strategies for overcoming frame disputes among organizations.

Diffusion and adoption literature discusses direct and indirect network ties (Soule 2007). Local food researchers may want to determine the best methods for facilitating the confluence of frame development, and through which channels of communication were these frames diffused and adopted? For example, were direct ties more influential than indirect ties, and why? The diffusion and adoption methods for frames will differ regionally and globally in regards to the most immediate needs of the local food system.

Future research in local food system research will also want to determine if collaborative organizations are not only gaining more funding opportunities, but how successful are they in meeting the criteria for expected project outcomes. Does this have any relationship with the diversity of human capital and their ability to successfully develop master frames? In addition, future researchers observing the collaborative tendencies of organizations will also want to determine if some of the same observations made here relating to lack of resources contributes to the lack of collaboration in other organizations working within the local food system. One question that may be considered is, does the lack of resources in these organizations lead to more emphasis on the self-perpetuation of the organization, and thus result in goal displacement? If organizational personnel, primarily those from organizations with less financial capital are spending more energy concerned with the preservation of their organization and jobs of employees, then there is less opportunity for accomplishing the goals outlined by their organization (Selznick 1957). Research in this area will also help determine if organizations are increasing collaborative ties to ensure collective action goals.

Recommendations for Marin County organizations

It is the inclusion of the diverse voices of local food system stakeholders that needs to be examined. However, this requires an increase in bridging relations to begin the conversation among organizational leaders. Jarosz (2000) recognized that for a local food system to thrive there needs to be an increase in trust. This requires reaching outside of the enclosed networks to consider the multitude of stakeholders and diversity of a sustainable local food system; balancing the economic, social, and environmental components must be an ongoing discussion and a part of the master frame as a whole.

Organizations leaders will want to consider the benefits of collaboration in regards to pooling capital resources. Eigenvector centrality data pinpoints those potential bridging opportunities for increasing the social capital and other capital resources, like human capital, to weave new ideas and strategies for movement success. Community development research has provided evidence of the higher success rates for collaborating organizations to secure project funding (Johnson et al. 2010). Moreover, Johnson and colleagues identified that funding institutions are seeking a more inclusive approach when funding project proposals. The rationale is the increased diversity in human capital through collaboration contributes to the legitimacy of the project proposal and perceived likelihood for success. This aligns with the findings from social movement research that demonstrates movement success with increased access to key resources, for example financial capital (Cress and Snow 1996). As a result, to gain and maintain legitimacy as organizations work toward 'sustainable change' in the local food system, the framework and messages will need to demonstrate a collective identity that resonates with constituents, policy makers, and the community as a whole. Key stakeholders within the county, such as the Marin Food Policy Council, will want to consider

the value in developing advocacy coalitions (Sabatier and Jenkins-Smith 1993; Flora et al. 2006). Advocacy coalitions are composed of organizations, government agencies, and others that form collaborative alliances to designing policy to address shared grievances and realize desired outcomes. The advocates can be either public or private organizations, and may vary in regards to size, and geographic location (Flora et al. 2006).

There are examples of advocacy coalitions already in Marin County, namely the Marin Carbon Project. The Marin Carbon Project, has developed alliances with Marin County farmers and ranchers, government agencies, academics, and non-profit organizations to address rising concerns of climate change. Their research and advocacy around carbon sequestration as a means for soil health and farm/ranchland sustainability has direct links to food system sustainability for future generations. The consortium that makes up the Marin Carbon Project may appear to focus on one specialized area of the food system, but in reality the management of soil quality touches on a number of areas regarding the sustainability of a local food system. Advocacy coalitions such as this provide frameworks from which other organizations working within Marin County's local food system will want to observe and determine how a larger, more encompassing advocacy coalition may be possible.

Finally, organizational leaders will want to consider developing measures of success for their organizations that are more inclusive in balancing the needs for increasing the sustainability of the local food system to help determine the best methods. A good starting point in Marin County is revisiting the 2007 County-wide Plan that already provides a guide for meeting some of the sustainability goals as they relate to the social, economic and environmental aspects of the food system. Determining how to collectively pool human and financial resources will be key to understanding where and how the bridging efforts begin.

The Marin Food Policy Council and advocacy coalitions will be a critical mediator in determining how organizational members can best utilize their resources, and ultimately propose needed policies for increasing the sustainability of the local food system.

APPENDIX A: ORGANIZATIONAL LEADER SURVEY

Marin County Organizational Network Survey

Please answer the following questions to the best of your knowledge. Thank you.

SECTION I: ORGANIZATIONAL INFORMATION

1) What is the name of your organization:

ORGANIZATION NAME: _____

- 2) How would you describe your organization's area of interest within Marin County? (Please circle all that apply):
 - a. Agriculture
 - b. Community Service (e.g., Food Pantry)
 - c. Environmental Sustainability
 - d. Product Marketing
 - e. Public Outreach and Education
 - f. Public/Private Land Stewardship
 - g. Public Resource Center
 - h. Training
 - i. Other? (Please Describe)
- 3) How long has your organization here in Marin County been in operation? Please write in answer here (years/months): ______
- 4) How many people, including yourself, are currently employed (not volunteers) at your organization? Please write in answer here: _____
- 5) How many people volunteer (un-paid time) to help support your organizations mission? Please write in answer here: ______

SECTION II: NETWORK AWARENESS

The next set of questions asks about your awareness of other organizations in the county and about their services.

6) Do you have any close personal friends or relatives involved in other organizations supporting a more sustainable local food system in Marin County?

- **NO**-Please skip to Question #7
- **YES**-Please list organizations

ORGANIZATION
1)
2)
3)
4)
5)
6)
7)
8)
9)
10)

7) Using the roster supplied, please list the numbers associated with **ALL THE ORGANIZATIONS** of which you are aware. Use comas to separate the numbers, for example: 1, 2, 3):

Organization(s):

- 8) Has your organization hosted community events aimed to support a more sustainable local food system in the past year? (Examples may include: farm tours, community forums around food security, hosting lectures by food scholars, chefs, farmers, etc.)
- **NO**-Please skip to Question #9
- **YES**-Please list below.

EVENT*
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

*If you need more room, please use the extra space provided below box and/or back of survey.

- 9) Over the past year, has your organization collaborated with other organizations in Marin County to host community events aimed to support a more sustainable local food system? (Examples may include: farm tours, community forums around food security, hosting lectures by food scholars, chefs, farmers, etc.). Please list ALL organizations. You may want to use the roster of organizations as reference if needed.
- **NO**-Please skip to Question #10
- **YES**-Please list below.

ORGANIZATION*	EVENT
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

*If collaboration involved more than one organization, please list each individual organization in separate rows. If more room is needed, please use space below and/or use the back of the survey.

10) Which organizations in Marin County are considered LEADERS in supporting the movement towards a more sustainable local food system (Please list below):

ORGANIZATION	
1.	
2.	
3.	
4.	
5.	

11) When seeking new ideas and/or practices to support your organization's mission, please list the name of the organization you normally contact.

ORGANIZATION	FREQUENCY OF CONTACT*
1)	
2)	
3)	
4)	
5)	
6)	

Question 11 Continued

ORGANIZATION	FREQUENCY OF CONTACT*
7)	
8)	
9)	
10)	

*Please indicate: daily, weekly, monthly, and/or annually. If you need more room, please use the space below and/or the back of the survey.

12) Please list the names of the organizations that normally contact YOU when they are seeking program support (for example, new ideas and practices).

ORGANIZATION	FREQUENCY OF CONTACT*
1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	

*Please indicate: daily, weekly, monthly, and/or annually. You may need more room. Please use the space below and/or the back of the survey.

SECTION III: ADOPTION OF PRACTICES FOR PROGRAM DEVELOPMENT

Organizations working for the advancement of a more sustainable local food system often share ideas, collaborate, and incorporate innovative practices and techniques that may increase the effectiveness of the organization's programs. For example, organizations will seek to educate their target audience about one or more aspects of a local food system, such as farm visits to educate the public about their food source.

- 13) From the list below, please choose the type of practices your organization utilizes (choose all that apply).
 - a. Advancing urban agriculture programs (e.g. urban farms, community gardens...)
 - b. Consumer support programs, (e.g., accepting WIC vouchers, CalFresh at markets)
 - c. Gleaning to increase fresh local food capacity in schools and communities
 - d. Increasing marketing capacity for local food producers, e.g., labeling, food

- e. Public education (e.g., accessing local food sources; nutrition around consuming fresh, local and/or organic ingredients)
- f. Training farmers/ranchers in sustainability practices
- g. None: (Please skip to Question 17)
- h. Other?
- 14) Based on your answer from the previous question, think about which one of these practices your organization MOST RECENTLY employed. When did you first become aware of the practice prior to incorporating it into your organization?
 - a. Organization has always used practice
 - b. Within last six months
 - c. Within last year
 - d. 1-3 years ago
 - e. 4 or more years
 - f. Unsure
- 15) Based on the most recent practice you chose in Question 13, when did you first adopt the practice into your organization?
 - a. Organization has always used practice(s)
 - b. Within last six months
 - c. Within last year
 - d. 1-3 years ago
 - e. 4 or more years
 - f. Unsure
- 16) Please name the organization(s) that have influenced you to adopt the practice(s) chosen in the previous questions. (In other words, which organization(s) utilized this practice before you?)

ORGANIZATION	PRACTICE
1.	
2.	
3.	
4.	
5.	

Many of the practices of organizations are also found among similar organizations at the regional, national and global level. It is common for one organization to adopt the practices of some of these organizations if they believe the practices will benefit their organization's mission. For the following questions, please consider the influence-if any-of organizations outside of Marin upon your organization.

17) Has your organization adopted practices from organizations outside of the county?

- NO-Please skip to question #18
- YES-Please list these organizations in order of prominence

ORGANIZATION*	PRACTICE
1.	
2.	
3.	
4.	
5.	

*If you need more space please list below and/or on back of survey

- 18) When your organization adopts a practice, what channels of communication do you typically utilize to learn about these new practices? Do you learn about them through (circle all that apply):
 - a. Word of mouth from friends
 - b. Word of mouth through acquaintances and colleagues?
 - c. Social media websites (e.g., facebook)
 - d. Website of another organization
 - e. Television
 - f. Radio
 - g. Academic journal
 - h. Magazine or book
 - i. Other? Please describe:

SECTION IV: COLLABORATION

Your answers to this next set of questions will help in understanding how individual and organizational features influence collaboration within the local food system in Marin County.

- 19) Have you observed innovative practices utilized by other organizations but have chosen NOT to adopt them into your organization?
 - NO-Please skip to question #20
 - YES-see below

If Yes, what was the reason(s) for not incorporating them into your organization: For each of the reasons listed in the rows below, please indicate whether you "strongly agree", "agree" "neither agree or disagree", "disagree" or "strongly disagree" that it is an important reason not to implement an innovative practice. Place an "X" in the appropriate box.

Question 19 continued

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Unaware of its applicability to my organization					
b) Not enough time to incorporate practice					
c) Lack of financial resources					
d) Lack of human resources					
e) Other? Please explain and rank:					
d) Lack of human resources					

20) When choosing an organization(s) to collaborate with on community projects, what are the main reasons for collaborating?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Missions are similar					
b) I know one or more people from the organization					
c) The organization has a lot of resources (e.g., financial capital)					
d) Lack of human resources					
e) Little expected from my organization					
f) The organization has well- trained personnel					
g) There is a high likelihood the project will succeed.					
h) Other? Please explain and rank:					

21) When deciding AGAINST collaborating with another organization(s), what are the main reasons(s) for choosing not to collaborate?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Missions are not similar					
b) I do not know anyone from the organization					
c) The organization does not have enough resources (e.g., financial capital)					
d) There is a lack of human resources					
e) There is too much expected from my organization					
f) The organization does not have well-trained personnel					
g) There is little chance the project will succeed					
h) Other? Please explain and rank:					

- 22) Do you currently belong to any other <u>local organizations</u> within Marin County that are also working in the field of sustainability?
 - **NO**-Please skip to Question # 23
 - **YES**-Please list which organization(s), and in what capacity (e.g., board member, volunteer, consultant, employee, fiscal sponsor, other?).

ORGANIZATION	ROLE
1.	
2.	
3.	
4.	
5.	

- 23) Do you belong to any other organizations OUTSIDE of Marin County that are also working in the field of sustainability?
 - **NO**-skip to Question # 24

• **YES**-Please list which organization(s), and in what capacity you were involved (e.g., board member, volunteer, consultant, employee, fiscal sponsor, other?).

ORGANIZATION	ROLE
1.	
2.	
3.	
4.	
5.	

24) Have you held an organizational leadership positions in the last 5 years?.... (Either local or organizations outside of Marin County)

- **NO-**Please skip to question 25
- **YES-**Please list the organizations below.

ORGANIZATION	POSITION	YEARS	LOCATION*
1.			
2.			
3.			
4.			
5.			

*If headquartered in Marin, write-in "local". You may need more room. Please use the space below and/or the back of the survey.

- 25) How long (months/years) have you been in your current position within your organization? Please write in your answer here: _____
- 26) Have you held public office or served on a govt. board in the past 5 years?
 - •NO-Please skip to Question #27
 - •YES-Please list information below

GOVT. BODY	POSITION	YEARS	LOCATION
1.			
2.			
3.			
4.			
5.			

27) Please indicate the sources of your organization's revenue (list in order of prominence)

FUNDING SOURCES	
1.	
2.	
3.	
4.	
5.	

28) What was your organization's net revenue for the last fiscal year?

- a. Less than \$20,000
- b. \$20,001-50,000
- c. \$50,001-75,000
- d. \$75,001-100,000
- e. \$100,001-200,000
- f. \$200,001-500,000
- g. \$500,000-1,000,000
- h. Over \$1 Million
- 29) Based on the stated revenue in the previous question, what was the <u>estimated</u> <u>percentage</u> allocated toward programs supporting sustainable local food systems work over the last fiscal year? Please write in your answer here: _____%
- 30) What is your highest level of education? Please circle one.
 - a. Some high school
 - b. High school diploma/GED
 - c. Some college
 - d. Associates degree
 - e. Bachelor's degree
 - f. Advanced degree (MA/MS, PhD, JD)
 - g. Other? _____

31) Please choose your sex:

- a. Male
- b. Female
- c. Other
- 32) In the space provided below, please offer your opinion about the types of barriers-if any- preventing your organization from providing its services to the target audience?

33) How can Marin County	organizations ind	crease their	support for	the sustainabi	lity of
the local food system?					

34) In the space provided below, please offer additional comments.

35) If you would like a copy of the results from this study, please provide your contact information. Please note, it may take up to one year for this information to become available to you. Thank you.

Preferred email or postal address for delivery:

Thank you!

APPENDIX B: IN-DEPTH QUESTIONNAIRE FOR ORGANIZATIONAL LEADERS

Introductory/Warm-up Questions:

Thank you for agreeing to participate in the second phase of this study...

• Please tell me a bit about your organization

Industrial agriculture and its food system has been criticized for issues related to a number of social, environmental, and economic concerns, for example, issues related to: commodity crops, toxins from inputs (such as pesticides), air/water pollution, GMOs, processed foods, animal welfare, labor rights, and more.)

• Do you see industrial agriculture and its food system affecting Marin County? If so, how?

Establishing a local food system is one way communities have attempted to combat some of the issues surrounding industrial agriculture, for example, conserving land, creating alternative markets, increasing the access of healthy, fresh food to low-income populations, and more.

• How do you see your organization as contributing to the local food system?

The term "sustainability" as it relates to agriculture, communities, and food systems can be contentious.

- How would you describe sustainability?
- How would you describe sustainability as it relates to your organization's mission? (Follow-up: What are the necessary components? Which component of sustainability is most important in your opinion?
- Does your perception of sustainability determine whether or not you will collaborate with another organization(s) in community projects? Why/why not?
- For Marin's food system to become more sustainable, who must be involved? (*Follow-up: do you see collaborative efforts among organizations as being necessary?*)
- Which organizations have the greatest influence in forming public policy to support increased sustainability for the local food system?
- What factors help these organizations to be influential? (e.g., group size, years in Marin, reputation? ability to recruit members, volunteers, financial capital)?

Collaboration

- How do you normally learn about new projects or events taking place in the county related to the local food system? (SC)
- How does the mission statement (or focus) of another organization(s) determine your willingness to collaborate with another organization? (Framing)

For the following set of questions, please rate the following statements using a scale of 1-5 where (1=Strongly Agree and 5=Strongly Disagree).

When deciding to collaborate with an organization, (Trust/Framing/Collaboration)

The potential partnering organization...

- Is able to contribute to the goals of the project
- Understands the main components of sustainability and how they relate to the local food system
- Is willing to include ideas of partner members to meet project goals
- I know one or more persons in the organization
- I trust this organization is serious about accomplishing project goals
- My organization is able to take a lead role in project development
- What are your expectations for other organization(s) when deciding to enter into a collaborative partnership, for example in a community or county-wide project? (*Follow-up: What minimal qualifications must they have?*)
- Has your organization (in recent memory) had to "cut ties" with another organization because they didn't meet your organizations' expectations? If so, please explain.
- Please name the main organizations in Marin County you typically engage with for community projects related to the local food system.
 - Which organizations normally contact you for new information and ideas?
 - What may limit organizational leaders' ability or willingness to work together (Follow-up: For example, lack of time, lack of trust or confidence in outcomes, suspicion toward the immobilizer's reasons, mission)?
 - How do you perceive if a project is going to succeed or fail? (*Follow-up: Are there certain "red flags" that lead you to believe a project is destined to fail. How might this persuade your decision to become involved?*)
- In your opinion, are Marin County organizations working well together in relation to improving the sustainability of the local food system? Y/N? How/Why?

- What might organizations need to do in order to improve their ability to work together?
- What might be missing in regards to increasing the sustainability of the local food system?
- What else would you like to add that I may have overlooked?

Thank you for your time

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