

THE SEVEN CS ETHICAL MODEL OF COMMUNICATION: ENVIRONMENTAL  
COMMUNICATION AND INDIGENOUS KNOWLEDGE MANAGEMENT  
STRATEGIES IN INTERNATIONAL AGRICULTURAL DEVELOPMENT

A Dissertation

by

ELISABETH L. S. MCCANN

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2012

Major Subject: Agricultural Leadership, Education, and Communications

The Seven Cs Ethical Model of Communication: Environmental Communication and  
Indigenous Knowledge Management Strategies in International Agricultural  
Development

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Chair of Committee,	Manda Rosser
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## ABSTRACT

The Seven Cs Ethical Model of Communication: Environmental Communication and  
Indigenous Knowledge Management Strategies in International Agricultural  
Development.

(August 2012)

Elisabeth L. S. McCann, B.S., Ohio University; M.A., Ball State University

Chair of Advisory Committee: Dr. Manda Rosser

This dissertation explores a number of issues facing international nonprofit organizations and individuals working in agricultural interventions supporting rural development with the goal of creating an ethical foundation of communication values and practices. A theoretical framework is formulated, with the principles of environmental communication as a foundation. Special emphasis is placed upon knowledge management strategies utilized when working with indigenous populations. From these theoretical foundations, the emergent 7Cs ethical model of communication is constructed via the concepts of: Collaboration, Culture, Community, Conservation, Capacity, Care, and Consistency. A critical-rhetorical ethnographic case study of the Binational Agriculture Relief Initiative's discourse is offered to explore the functionality and applicability of the 7Cs model. Using the 7Cs model as a guide, this analysis examines issues associated with nonprofit advocacy and developing communication strategies for international organizations serving agricultural development. Conclusions

for the 7Cs ethical model of communication offer perspective on the model as a discursive response to neoliberal policies and international development ethics.

## DEDICATION

This work is dedicated to Boots and her legion of magnanimous ladyfriends.

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## NOMENCLATURE

ASERCA	Apoyos y Servicios a la Comercialización Agropecuaria
BARI	Binational Agriculture Relief Initiative
COP	Communities of Practice
CONASUPO	La Compañía Nacional de Subsistencias Populares
CSA	Community-Supported Agriculture
DDT	Dichlorodiphenyltrichloroethane
HYV	High-Yielding Variety
JEP	Jalisco Environmental Project
MDG	Millennium Development Goals
NAFTA	North American Free Trade Agreement
NGO	Non-governmental Organization
PRA	Participatory Rural Appraisal
PRI	Partido Revolucionario Institucional
PROCAMPO	El Programa de Apoyos Directos al Campo
PROCEDE	Programa de Certificación de Derechos Ejidales y Titulación de Solares
SAL	Sectoral Adjustment Loan
SAP	Structural Adjustment Programs
T&V	Training and Visit
USD	United States Dollars
WTO	World Trade Organization

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CHAPTER I  
INTRODUCTION: INTERNATIONAL AGRICULTURAL  
DEVELOPMENT IN THE 21<sup>st</sup> CENTURY

This system, however—deliberately poisoning our food, then policing the result—is too reminiscent of Lewis Carroll’s White Knight who thought of a “plan to dye one’s whiskers green, and always use so large a fan that they could not be seen.” (Carson, 1962, pp. 183-184)

Before *Silent Spring* was published, Rachel Carson faced public attack and threats of lawsuits to prevent the book’s release. Efforts organized by agrochemical-giant Monsanto and other members of the industry aimed to suppress her eloquent and precise prose that uncovered the damages to ecosystems caused by agrochemical usage (Matthiessen, 1999). Detailing how dichlorodiphenyltrichloroethane (DDT), a commonly used pesticide, enters and endures in the food chain, Carson argued that agrochemical use contaminated the entire food supply. Public response to her book resulted in the United States banning DDT in 1972 (Environmental Protection Agency, 1972) and is considered to be one of the watershed moments in the birth of the modern environmental movement (Cafaro, 2001; Coglianese, 2001; Sills, 1975).

Agriculture is more than production of crops and livestock. Feeding the world’s population is a challenging and complex issue, fraught with ethical considerations. As a

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This dissertation follows the style of *Environmental Communication: A Journal of Nature and Culture*.

field, international agricultural and extension education addresses a number of dilemmas. Shinn, Wingenbach, Lindner, Briers, and Baker (2009), described the field as “a knowledge exchange system that engages change agents in a participatory persuasive process of educating global stakeholders and preparing future farmers, agricultural specialists, and agribusiness leaders in a changing world” (2009, p. 83). Agriculture is connected to local, national, and international markets, transportation, chemical production industries, irrigation practices, land tenure concerns, issues of policy, human resource development, and farmers’ organizations, to name a few (Eicher, 1998; Erskine & Nesbitt, 2009; Penson, Capps, Rosson, & Woodward, 2006). Consequences of agricultural practices present challenges for contemporary decision makers including urban population increases, land access issues, food security, soil degradation, water pollution, soil pollution, desertification, and the toxic effects of chemical use on ecosystems and humans (Amini, 2008; Bello, 2009; LaSalle, 2009; Penson et al., 2006; Shiva, 1991).

This dissertation addresses challenges within the context of international agricultural development with the goal of constructing theoretical foundations that improve communication strategies. As a field, we must respond to the environmental consequences of agricultural practices in the late twentieth-century in order to create a sustainable world for future generations. Appropriate theoretical considerations shape a new understanding of practices that address ecological, political, and social challenges of international agricultural development from the community perspective. The goal of this dissertation is to create a theoretical foundation that emphasizes ethical aspects of



communication practices in order to promote successful partnerships with local communities.

### **Agriculture's environmental legacy**

Agriculture has evolved significantly since the first gatherer. Its presence as a global economic force, impetus for scientific discovery, and vessel for technological advances has revolutionized the human race and prevented famines by increasing the food output. As Carson (1962) warned, such gains are not without consequence. Today, agricultural lands producing crops and livestock cover between 40-50% of the earth's surface, and farming practices account for an estimated 10-14% of greenhouse gas emissions annually (De Pinto, Magalhaes, & Ringler, 2010; P. Smith et al., 2007); a figure that excludes the emissions from converting land to agricultural production. Glyphosate is one of the most commonly used herbicides in the United States, and is found in products such as RoundUp and Rodeo. Glyphosate usage in the United States increased 600% between 1992 and 2002 (Gianessi & Reigner, 2006) as a consequence of the increased use of genetically-modified seeds. McKinlay, Plant, Bell, and Voulvoulis (2008) researched the ubiquity of detrimental inputs used in agriculture containing endocrine-disrupting chemicals that impair cell development in humans and have damaging watershed effects on ecosystems.

There are also economic, social, and political consequences tainting agriculture's legacy for the world. Agribusiness has shifted from supporting a culture of farming to promoting scientific and technological advances that farmers must adopt if they wish to remain competitive with large industrial farms on the global market (Amini, 2008;

Penson et al., 2006). In the ideal capitalist market structure, social welfare is maximized by the freedom of access and competition in the market. Agriculture is inextricably tied to natural resources, which complicates the ability to prioritize economic goals over social welfare. There are almost no cases where a perfect market and its ideal consequences exist (Penson et al., 2006).

Agriculture is the largest economic sector completely dependent on a healthy and functioning environment, but industrial agriculture has many environmental consequences. Industrial agricultural production threatens soil health and water resources on the local and regional levels. Globally, carbon emissions from agricultural practices contribute to the greenhouse effect, which is part of the cause of global climate change (LaSalle, 2009). Climate changes have the power to affect local production, food security, international trade, and human migration (Penson et al., 2006). Agricultural research addressing issues connected to climate benefits from considering local social values and changes to environmental conditions. Hoffman (2011) explained the opportunity for social scientists to contribute to the social and political domains regarding public understanding of climate change realities. Individuals and organizations working in agricultural development address many of these conditions when they consider soil health, water use, and weather patterns affecting production.

The scientific conversation surrounding global climate change has been active since a physical chemist predicted global temperature rise based on increased atmospheric carbon dioxide in 1896 (Weart, 2011). Initially, the scientific community was skeptical of this claim. Over time, a variety of scientific research was conducted that

confirmed this assertion, as public awareness of environmental issues grew. By 1989 the scientific community had a consensus that the public also accepted (Weart, 2011). As policy makers began designing policies that accounted for environmental implications of carbon emissions, organizations representing industrial corporations called the existence of the scientific consensus into question (Weart, 2011). The corporations were attempting to sway public opinion regarding climate change to avoid policies that would force changes in corporate behavior. The strategy was to create skepticism surrounding the definition of the problem (Hoffman, 2011), which undermined attempts at corrective policy. Schwartz (2011) explained that climate change deniers “impede the free development of science” (p. 118) by creating skepticism about the problem instead of formulating solutions. Anderegg, Prall, Harold, and Schneider (2010) explained that 97-98% of climate researchers agree that anthropogenic climate change is legitimately occurring around the world, and should not be disputed. International agricultural development initiatives must consider an innovation’s impact on nature, because the future of agricultural production requires a functioning environment.

### **Contemporary problems in agricultural development initiatives**

#### ***Limitations in local infrastructure***

One cannot begin to address the realities of agricultural production without acknowledging how its social and political aspects influence farmers (Lopez, 2007). International funding for development projects may also disrupt local political and social systems (Amini, 2008; Penson et al., 2006). Property rights, or “privileges and limitations that are associated with the ownership of a resource” (Penson et al., 2006, p.

217), need to be consistent and fair in order to establish a market foundation for distribution of goods (Fitting, 2011; Lopez, 2007; Lungu, 2007). Outside organizations may experience difficulty when addressing the complex realities of land tenure reform. Additionally, cultural biases and beliefs may cloud the ability of development workers to fully integrate innovations and development programs into local communities (Thompson & Scoones, 1994). Political structures may interfere with program success, and, in some cases, program placement may interfere with local political contexts.

***Improving yields, preserving the environment***

Thomas Malthus's prediction in the 18th century that the exponential growth of the human population would soon eclipse the ability of the planet to produce food undergirds contemporary theories of agricultural development. Malthus's prediction was used to establish the need and urgency of projects addressing production and farming practices. Although on a rational level it may make sense to base an entire field of study on the fear of the perceived truth within Malthus's prediction, there are also serious problems with using this as the baseline premise for global agricultural development practices. Complicating the opportunity for a variety of development perspectives are governmental allocations of resources, which primarily fund scientific research in improving yields (Antholt, 1998; Penson et al., 2006). Increasing crop production is a worthwhile goal of agricultural improvement, yet is only one aspect of long-term development. Much is unknown about cumulative and watershed effects of technology, such as genetically-modified seeds, because long-term testing relies on adoption outcomes. Although an innovation works in the laboratory setting, replicability may be

affected in a “real world” scenario where humans with varied scientific and agricultural knowledge control the process. As Antholt (1998) explained, “The diffusion model obscures the fact that farmers are innovators, not just passive receptacles of information” (p. 355).

Agricultural development has focused on ways to introduce new technology to increase production. Long-term effects of the technology are rarely understood and frequently contribute to diminished soil capacity, drain local economies, and have myriad negative environmental impacts. Instead of preventing Malthus’s prediction, technological improvements may speed its realization. Considering other theoretical priorities may refocus agricultural development strategies in directions that have more long term benefits.

### **History and trends in international agricultural development**

Antholt (1998) and Pretty (1995) address the history of international agricultural extension and development practices and policies, focusing on the use of industrially-manufactured chemical inputs such as non-organic fertilizers, herbicides, and pesticides in order to increase food production. Studies in the 1950s and 1960s highlighted the efficiency and poverty of small-scale farmers in developing nations. To address the endemic poverty of peasant farmers, innovations were introduced to increase yields with the hope of increased income as a consequence.

After World War II, nitrogen fertilizer supply was abundant from leftover munitions manufacturing. Animal manure and mineral fertilizer were replaced when fertilizer use increased as excess munitions were converted into nitrogen fertilizer. When

combined with recently developed hybrid crops, productivity and yields increased. Irrigation advances accompanied this development, which increased demand on local water supplies. Farmers in developing nations, especially throughout Mexico and Latin America, adopted these practices in order to increase yields (Fitting, 2011; Holt-Gimenez, 2006; Thieshusen, 1995). At the time, traditional agricultural extension models in Latin America were ineffective; therefore, any technological improvements were perceived to be an improvement from the status quo (Antholt, 1998). The role of agriculture in development activities has evolved since the 1950s, when economists did not consider agriculture to be a significant contributor to economic growth (Eicher, 1998). Since the 1950s, the role of international agricultural development has shifted from one used to secure labor support for industrial practice to one integrally related to priority issues including economics, food security, social justice, globalization, and the environment.

### ***International agriculture development and the Green Revolution***

In the 1960s, research completed by Dr. Norman Borlaug at the International Maize and Wheat Improvement Center in Mexico produced wheat varieties that were more responsive to nutrients, had stiffer cell walls to support more grain on less stalk, were resistant to pests and diseases, and could grow quickly. The first high-yielding variety (HYV) developed was wheat, but techniques soon developed to improve crops such as beans, cassava, corn, maize, millet, rice, sorghum, and soybeans. These HYVs are the forerunners of today's genetically-modified seeds. Mexico was the first developing nation to embrace an agricultural Green Revolution, primarily in its northern

agricultural fields (Fitting, 2011). Green Revolution innovations spread to developing nations around the world in the 1960s and 1970s, which temporarily increased production (Shiva, 1991). Adoption of new technologies and increasing fertilizer use led to agriculture's increased commercialization and the necessity for technical training for farmers (Mellor, 1998). As an addendum, it is relevant to acknowledge the dissemination of Green Revolution improvements was motivated by political mores at the time (Fitting, 2011). To counteract social unrest in developing nations, a "Green Revolution" contrasted the "Red" ones, that were a result of the rise of communist and socialist leadership in other world powers (Fitting, 2011).

Not only did this new approach change the practice of agricultural development, but it also had long-term effects on the field. Staatz and Eicher (1998) explained, "One of the important lessons of the past decades is that, with rising population pressure on land, technological change must be included as a central component in both the theory and the practice of agricultural and rural development" (p. 13). Antholt (1998) argued that Green Revolution practices reinforced the "limited, linear, and sequential view of how information and knowledge need to be developed and made accessible to farmers—that is, from basic science, to applied science to technological innovations to farmer recommendations" (Antholt, 1998, p. 355). A new understanding of practices that develop knowledge and practice for farmers is necessary if agricultural development practitioners are to respond to these problems, while learning from the improvements of the Green Revolution (Amini, 2008; Bunch, 2000; Holt-Giménez et al., 2010; Lopez, 2007; Shiva, 1991).

The most significant Green Revolution improvements helped prevent famine, as calorie availability and population stability increased in Latin America and Asia. Green Revolution production relied on purchased chemical inputs and mechanization which utilized monocropping, and therefore was most accessible to those who could afford it. Mechanization of agriculture aided production increases by allowing a single farmer to manage larger acreages. Increasing soil inputs with manufactured fertilizer, herbicide and pesticide usage decreased growing time, which enabled individual farmers to grow multiple crops on the same land throughout the year. Farmers around the world benefitted from improved income and increased demand. In 1970, Dr. Norman Borlaug won the Nobel Peace Prize for his contribution to famine prevention. He stated in his Nobel Lecture that the Green Revolution was a temporary success in the struggle against famine and that human population growth would continue to challenge agriculture (Borlaug, 1970).

### ***Extension services after the Green Revolution***

Extension services after the Green Revolution sought to address a number of issues affecting the efficacy of program development and success (Thompson & Scoones, 1994). Primarily, extension had the goal of streamlining the transfer of technology to farmers. As resources aided in developing seed and chemical technology, the job of extension was to apply the diffusion of innovation model to help farmers adopt innovation. Because of the amount of technology and number of innovations yet to be introduced to farmer networks, extension services increased their capacity to intervene



with more training, more personnel, and more material support in the form of equipment, seeds, chemical inputs, and buildings.

In the late 1960s, the training and visit (T&V) approach to extension focused on managing extension systems (Antholt, 1998). T&V was promoted in more than fifty developing countries by the World Bank from 1975-1998 (Anderson, Feder, & Ganguly, 2006). Extension agents were trained in the innovation and visited farmers regularly to disseminate various technologies. T&V utilizes a single chain of command and focuses on providing advice via direct and scheduled contact with farmers, regular training, and close ties to research (Farrington, 1994). Criticism of this approach (1) addressed the cost of so many employees (Antholt, 1998; Feder & Slade, 1986), (2) advocated the use of the media to spread innovation information, (3) highlighted the difficulty to implement T&V due to its reliance on farmer organizations, and (4) focused on bias in the system that favored wealthier farmers (Feder & Slade, 1986). Feder & Slade (1986) explained the more technical the innovation, the more extension support was required to diffuse technology. In their case study, Ntifo-Siaw and Agunga (1994) found that too much of the training for and conducted by extension agents in Ghana was focused on correctly learning about the innovation, and not enough emphasis was placed on adult education, communication strategies, and management skills. Eventually, T&V extension's high costs combined with budget limitations of private-sector funding contributed to its phasing out as a preferable extension method (Anderson et al., 2006).

### ***Structural adjustment programs in developing nations***

In the 1980s, globalization's burgeoning effect on agricultural development brought about structural adjustment programs (SAPs) and trade agreements designed with macroeconomic policies to increase market capabilities of developing nations and foster economic stability (Staatz & Eicher, 1998). At this point, the guiding foundation of agricultural development was more shaped by economic policy than innovation technology because economic initiatives worked to develop an infrastructure for agricultural markets. Supported by the World Bank, the International Monetary Fund, and other donors, SAPs enabled developing countries to provide economic support for agriculture through economic policy changes. Privatized state enterprises, restructured institutions, and economic growth dependent upon export goods are characteristics of SAPs, which rely on external foci for program stability. Externalizing the focus of developing economies contributed to the need to reduce international trade barriers and tariffs. In the late 1980s and 1990s, the expansion of international trade agreements like the North American Free Trade Agreement (NAFTA) led to increased integration of domestic and international markets and the creation of the World Trade Organization (WTO), whose purpose is to handle trade disputes, encourage world trade, and serve as a nexus of trade negotiations (Staatz & Eicher, 1998). As Staatz & Eicher (1998) observed,

Given the importance of trade and international capital flows, macroeconomic policies often have more impact on rural incomes than do agricultural policies. The increased influence of world trade in dictating

domestic agricultural policies has led to concerns about whether countries can provide safety nets for the poor and national environmental policies without violating WTO rules. (p. 23)

***The expansion of nongovernmental organization programs***

The 1980s was also an era when local and international nongovernmental organizations (NGOs) gained influence in development issues as NGOs filled gaps left by ineffective government extension programs (Bebbington & Farrington, 1993; Staatz & Eicher, 1998). Farrington and Biggs (1990) described NGOs as having a philanthropic orientation while maintaining formal institutional structures and volunteer participation. NGOs may provide services to aid in development, work to build capacity of local communities through organization building, and/or engage in advocacy and policy work at the local, national, or international levels (Farrington & Biggs, 1990).

Farrington (1994) explained that collaborations between government services (research and extension) and NGOs “enhance the prospects of technical effectiveness, cost sharing and of cost recovery, thereby increasing the impact of extension per unit of government expenditure” (p. 5). Farrington’s beneficial outcomes exemplify why NGO partnerships with extension grew to replace T&V practices. Involving NGOs should, “increase the impact of programmes in grassroots development and poverty alleviation, and contribute to the democratization of the development process” (Bebbington & Farrington, 1993, p. 199). Typical collaborative projects paired NGOs with extension initiatives, which allowed for a division of labor in agricultural development. Extension

provided the information and the technology, and the NGO aided in diffusion and citizen participation, which democratized the innovation (Bebbington & Farrington, 1993).

Farrington (1994) explained that small-scale programs administered by NGOs have the potential to increase rural communities' empowerment. As civil society structures emerged in some developing nations, local nonprofit organizations were able to provide services to local populations. International NGOs aided in rural development programs and disaster relief initiatives. In other cases, in the wake of Guatemala's civil wars for example, international aid came in the form of capacity-building NGOs working to re-establish a country's fundamental food production and human rights protocols (McAllister, 2009).

### ***Environmental awareness in international agricultural development***

In the 1990s, the importance of uniting the goals of environmental initiatives with agricultural development gained prominence. The 1987 Bruntland Report raised awareness of the environmental implications of agricultural practice. Addressing challenges from a holistic perspective, it considered problems of ecosystems, energy, food security, human resources, industry, and population to be interrelated and solved through collective action (World Commission on Environment and Development, 1987). In developing countries, collective and collaborative efforts are even more critical, because the citizens managing land are farmers and herders who rely on the land for survival (Eicher, 1998; Iglesias, Quiroga, & Diz, 2011).

In September 2000, the United Nations adopted the United Nations Millennium Declaration, committing to reduce global poverty through global partnerships by 2015.

The declaration reaffirmed the urgency to develop appropriate agricultural development practices to prevent famine and emphasized the value of cooperation to solve complex systemic problems. The list of Millennium Development Goals (MDGs) include: end poverty and hunger, universal education, gender equality, child health, maternal health, combat HIV/AIDS, environmental sustainability, and global partnership (United Nations, 2010). Agricultural development organizations around the world have engaged projects to address MDGs within the United Nations' timeframe (Sachs, 2005).

The skill set of those working in international agricultural development is a sophisticated toolbox. Professionals working in international agricultural development focus on 12 contemporary knowledge domains (Shinn, Wingenbach, Briers, Lindner, & Baker, 2009): agricultural and rural development, agricultural and biophysical systems, delivery strategies, learning theory, change and technology adoption, organizational development, human resource development, scholarship and communications, research methods and tools, philosophy, history, and policy, instructional design and curriculum development, and planning/needs assessment and evaluation. Educational imperatives include “skills related to the natural and social sciences, globalization, and cultural diversity that produce healthy, socially responsible, ecologically-sound citizens relevant in the 21st century” (Shinn, Wingenbach, Lindner, et al., 2009). This aids in the development of “global citizens” mindful of consequences of their actions and recommendations. The myriad skills for success required by international agricultural development professionals demand effective communication addressing natural resource usage to confront inherent ecological, political, and social challenges of the field.

### **Contemporary environmental challenges in international agricultural development**

At the time of their development, Green Revolution strategies addressed a specific problem, which prevented the continuance of massive global famine. As practices were adopted in Latin America and Asia, systemic effects emerged. The growing rural labor force had steady employment, and the growing urban labor force had a steady food supply. Yet, sector-by-sector strategies used by the Green Revolution caused fragmentation in development approaches. The focus on production without accounting for long-term effects on social and environmental factors created barriers to effective policy initiatives. Today, fertilizer, herbicide, and insecticide use are common practices in farming, and new environmental and social challenges face agriculturalists. The long-term consequences of detrimental inputs (industrially-manufactured fertilizers, herbicides, pesticides) are now common conditions of global agriculture. Soil diseases, pest-infected and treatment-resistant crops, waterlogged deserts, topsoil erosion, and indebted farmers (Iglesias et al., 2011; LaSalle, 2009; Lopez, 2007; Rodale & McGrath, 1991; Shiva, 1991) are the costs of the Green Revolution's increased yields. The consequences of the detrimental inputs of industrial agriculture release greenhouse gases and leach nitrogen and phosphorus into water supplies (Jarvis, Ramirez, Anderson, Leibing, & Aggarawal, 2010; Lopez, 2007).

#### ***Fossil fuel reliance***

The energy dependence of chemical agriculture keeps farmers reliant on detrimental inputs, which continues agriculture's negative effect on environmental health. Currently, the use of genetically-modified seeds fuels the usage of detrimental

inputs in the soils (Fernandez-Cornejo, 2010, July 1). Genetically-modified seeds are engineered to resist application of certain chemicals used against pests and weeds. Some weeds are now resistant to the herbicides, like glyphosate, designed to control them, intensifying the need for proper management (Cerdeira & Duke, 2006; Kremer, 2009; Webster & Sosnoskie, 2010). Agriculture's reliance on fossil fuels contributes significantly to changes in climate including droughts, flooding, temperature shifts, and desertification (Edwards, Kleinschmit, & Schoonover, 2009; P. Smith et al., 2007).

### ***Sustainability***

Sustainability in agricultural development is also an important contemporary issue (Deumling, Wackernagel, & Monfreda, 2003; Iglesias et al., 2011; Valentine, 2005). Those adopting sustainable practices in regard to land usage have had an uphill battle incorporating these practices in the context of conflicting power structures, resource claims, and available support structures (Bello, 2009; Michael, 2004). The role of policy in agricultural initiatives is critical, but is often overshadowed by technology (Paul & Steinbrecher, 2003). Although technological innovations rely on new developments for improvement, truly sustainable innovations rely on people to improve local resilience and create global stability (Bunch, 2000; Lopez, 2007). This does not imply that sustainability and technology are mutually exclusive. Instead, the focus is on initiatives and projects that employ appropriate technologies that mesh with existing infrastructure, cultural values, and available resources. A strong communication foundation is imperative to negotiate these issues.

## **Organizations and leadership in international agricultural development**

Agricultural leadership and communication in international development operate at the intersection of many disciplines: agriculture, anthropology, science, ecology, economics, education, geography, political science, and sociology to name a few. NGOs supporting international development must navigate a variety of contexts and structures when building collaborations, seeking funding, and implementing programs (Piña, 2001). To function in any environment, organizations (governmental and nongovernmental) need to develop skills and practices necessary to successfully implement programs.

Prusak (2001) explained that an organization is “a coordinated collection of capabilities, somewhat bound by its own history, and limited in its effectiveness by its own history, and limited in its effectiveness by its current cognitive and social skills” (p. 1003). To survive and be self-sustaining, an organization must manage a number of factors contributing to success. Factors in the larger society that affect organizational success include: globalization, increased complexity of information and relationships, new technology, the role of competition, and shifting political, social, and economic structures (Mårtensson, 2000). At the forefront of concern is how information within an organization is used to promote evolution of ideas and the organization itself.

Bureaucracy, capitalism, markets, and technology are all found within the nexus of culture as part of the “nature of things” and “purposes of action” that concurrently shape collective identities, entities, and parameters of state intervention (Boli & Thomas, 1997, p. 173). International NGOs share guiding principles of individualism, rational



progress, strong collective voices, universalism, voluntaristic authority, and world citizenship that guide their strategies (Boli & Thomas, 1997; Brumley, 2010; Srinivas, 2009). The guiding principles are derived from structures within world culture that the NGOs are involved in developing, and concurrently “shape the frames that orient other actors, including states” (Boli & Thomas, 1997, p. 173). As a result, nature may receive better environmental consideration in policy initiatives, while at the same time experiencing an increased potential for exploitation. NGOs are caught in the web of conflict attempting to work through multiple channels of communication, which may undermine their effectiveness if not managed. Boli and Thomas (1997) explained that NGOs influence a number of factors in communities, but are rarely seen as actors within contexts. Organizations working in bi-national contexts encounter specific constraints when developing concurrent initiatives in differing, and sometimes conflicting, cultural, economic, political, and social contexts (Fox & Rivera-Salgado, 2005; Piña, 2001; Rivera-Salgado, 1999). To more fully understand the role of an NGO in its particular context, the goals of the organization must be considered in conjunction with the strategies used (Brumley, 2010).

There is concern that traditional organizational approaches to knowledge dissemination have supported development initiatives that are detrimental to local populations. Kothari (2005) addressed the role of the development organization agent as expert in development scenarios. Kothari contended that development experts are contemporary agents of colonial discourse. The danger is that all knowledge in these scenarios functions from a top-down perspective that legitimizes the expert and

reinforces divisions between developed and developing countries. If this happens, local perspectives and practices are lost as global knowledge is more highly valued. Kothari explained that increasing the value of “professionalism” in development discourse reinforces neoliberal structures.

### ***Organizational knowledge***

The role of information in any organization influences members’ identity, function, and ability to grow. How members of an organization use the data, information, and knowledge they encounter is a necessary consideration for organizational leadership. If an organization is going to survive multiple contexts and conflicts, the need for integrating knowledge from diverse perspectives increases (Litchfield & Gentry, 2010), as does the opportunity for collaboration. As Farrington and Biggs (1990) explained, “NGOs’ flexibility in choosing their subject area, the sources of information on which to draw, the vehicle of communication and their clientele give them a potentially important and independent role in information exchange” (p. 483). NGOs working in international agricultural development contexts must serve as sources of institutionalized scientific knowledge, cultural knowledge, traditional agricultural practices, technological agricultural advances, and economic structures, aiding the flow of information among diverse audiences.

Internally, organization members, including staff and volunteers, have various types of experiential knowledge and must co-negotiate program development and institution building. International collaboration with historically disadvantaged and indigenous populations requires special attention to intercultural and socio-political

concerns (Quintana, 2004). Successful coordination of NGO workers is the first step in creating effective partnerships on the ground in local communities.

### ***Local populations and change***

Members of organizations sponsoring agricultural development programs play a role in guiding local populations through change. They must individually account for their own social commitment, awareness of program content, and potential consequences (Quintana, 2004). Development interventions train farmers to implement a variety of procedures and innovations with the goal of improving the living conditions and socio-political circumstances within a variety of contexts and structures. Research addressing development interventions typically focuses on end-result analyses and extra-organizational factors, which may include program evaluation and community opinions of improvement. The combination of member knowledge and organizational purpose contributes to the larger frame of organizational identity, which influences future member education and organizational development. Practitioners and scholars can benefit from understanding how organizational identity functions within these delicate, difficult, and divided social and cultural structures.

### **Importance and overview of study**

With contemporary concerns regarding agriculture and its relationship to the environment, practitioners working in development scenarios must respond to these concerns (Bunch, 2000). This study contributes to the foundational perspectives of international agricultural development through an emphasis on environmental communication and knowledge management. The goal is to establish a communication

model that maintains local voices during decision-making processes in designing intervention strategies. The framework of perspectives formulates a model of ethical communication in contexts dealing with local populations. This pragmatic perspective will aid in improving organizational communication, development, and leadership. The ethical constructs put forth in the model contribute to the knowledge domains necessary for professionals in international agricultural development by providing a foundation for considering the adaptability and appropriateness of strategies. Further, this model emphasizes engagement with communities on the personal level, creating fewer hierarchical leadership and knowledge issues (Kothari, 2005).

This study begins by constructing an ethical model of communication for use in international agricultural development initiatives. By focusing on aspects of communication that can be emphasized throughout planning, development, training, implementation, and assessment, the model lays a framework for NGOs and other external organizations serving local communities. After defining and explaining the tenets of the model, a case study illustrating the organizational discourse of the Binational Agriculture Relief Initiative (BARI) is presented. Using the ethical model of communication as a guide, suggestions for program planning and organizational development are offered for the BARI. Finally, conclusions for the 7Cs Ethical Model of Communication will be addressed.

## CHAPTER II

### REVIEW OF PERTINENT LITERATURE: FOSTERING ETHICAL COMMUNICATION IN INTERNATIONAL AGRICULTURAL DEVELOPMENT INITIATIVES

Global agriculture requires critical perspectives to create and guide policies and programs that benefit communities where the programs are implemented. As Bunch (2000) explained, “we are not here to develop their agriculture, but to teach them a way in which they can develop their own agriculture” (p. 138). Teaching in an increasingly globalized political and production climate is affected by conflicts on a number of levels. Conflicts within agriculture are grounded in confronting the epistemology of agro-environmental knowledge (Cohen, 2009). The charge for international agricultural leadership is to find a means to increase participation and empower communities to adopt sustainable policies and practices (Bello, 2009; Bunch, 2000; Carolan, 2006; Eicher, 1998; Michael, 2004; Narayanasamy, 2008; Pretty, 1995; Rodale & McGrath, 1991; Shiva, 1991; Termeer, Hilhorst, & Oorthuizen, 2010; G. B. Walker, 2007). A multi-faceted approach where outcomes are generated by affected parties lays the foundation for long-term developments. Innovation and change rely on trust within knowledge networks that endures over time (Carolan, 2006). Traditional strategies used in international development initiatives to connect participant communities with development workers and programs are frequently based on the diffusion of innovations model and rely on local engagement through Participatory Rural Appraisal (PRA),

Farmer Field Schools, and standard extension programs (Eicher, 1998; Narayanasamy, 2008; Ruttan, 1998).

In this chapter, the advantages and necessity of incorporating environmental communication imperatives into international agricultural development are explored. My goal is to establish a framework of perspectives that provide a conceptual context to formulate a new model of ethical communication for development practitioners. I open with a review of pertinent literature on environmental communication; I explore inherent connections between contemporary challenges in international agricultural development and the field of environmental communication and its imperatives. Next, I offer an analysis and critiques of the diffusion of innovation model as a theoretical foundation of contemporary international agricultural development programs. Finally, a discussion of knowledge management perspectives is offered to describe the challenges inherent in working with indigenous knowledge content and structures.

It is not my contention that contemporary agricultural development initiatives are engaging in incorrect or detrimental communication. Alternatively, my position is that we can embrace vocabularies utilized by the communities we serve, and incorporate more aspects of local knowledge management into program design and implementation. Attention to discourse used within communities and communicated from agencies/NGOs is helpful in constructing a program with a higher chance of sustainability and adherence to local behaviors.

## **Environmental communication**

Emerging from the work of multidisciplinary scholars analyzing the rhetoric present in natural resource conflicts, the field of environmental communication addresses, among others, science, globalization, media, social justice, and agriculture. Cox (2006) defined environmental communication as, “the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and negotiating society’s different responses to them” (p. 12). Environmental communication is a vehicle for education, persuasion, problem solving, and mobilization. Cox (2006) outlines seven primary areas of study within the field: environmental rhetoric and discourse, media and environmental journalism, public participation in environmental decision-making, advocacy campaigns, environmental collaboration and conflict resolution, risk communication, and representations of nature in popular culture and green marketing.

Cox (2007) examined the function of the field of environmental communication, noting similar ethical constructs to conservation biology. As a multidisciplinary field, conservation biology is a crisis discipline which developed in response to the recognition of anthropocentric causes of extinction. In a crisis discipline, decisions occur in the contexts of urgency and uncertainty. The ethical duty demonstrated by conservation biology, to educate to prevent future destruction, is one environmental communication scholars should consider. Recent public environmental controversies regarding access to

and incorrect or conflicting information demonstrate the critical juncture at which environmental communication resides. Cox (2007) stated,

The politicization of knowledge claims, subordinating of science, limiting of guarantees for public participation, and ...the encroachment of the 'technical sphere' on public sphere deliberations, now threaten to undermine our capacity as a society to engage intelligently the increasing signals of environmental distress or deterioration. (p.12)

M. N. Peterson, Peterson, and Peterson (2007) expanded on Cox's assertion, describing environmental communication's ability to meet the ethical challenge by engaging in destabilization of borders and embracing ecofeminism's critique of hierarchies and binaries. The less static the border, the more integrated the community, the more potential for engaged communication. All citizens should have the same opportunity to contribute to the decision-making process, which should involve dissent and negotiation in order to create democracy. The political emphasis placed on the process extends to the researcher's imperative to interpret and translate the voices of stakeholders who may not have opportunity to contribute.

Schwarze (2007) suggested expanding the concept of environmental communication to treat crisis as a concept and object of inquiry. As an object, the concept of crisis includes the material degradation of the environment as well as the social/symbolic attempts to create meaning about the circumstances. As a concept, crisis serves as a nexus for different perspectives and methods that contribute to the field's discourse. This perspective represents the temporal factors that affect environmental



issues as well as a context for invention. This creates opportunities for scholars of environmental communication to not only identify and critique problems within existing discourse, but also propose solutions that describe and address environmental issues for the future.

***Environmental communication and risk in natural resource settings***

Addressing the function of communicating about risk within environmental communication, Heath, Palenchar, Proutheau, and Hocke (2007) explained, “Experts and regulatory agencies often operate on the assumption that they and their audience share a common framework for evaluating and interpreting risk information” (p. 38). Typically, these frames are constructed consciously and unconsciously within the mind in order to understand environmental issues (Lakoff, 2010). Risk, as Heath et al. (2007) asserted, is an intersection where science and society collide, exposing their different frameworks. Values, experience, and context affect message exchanges between populations evaluating risk at different points in time. Communication that creates an understanding of risk provides insight about risk during the time of crisis and educates once the crisis has ended; offering insight about the timeliness of the crisis, as well as the conceptual understandings of those communicating and receiving information. Palenchar and Heath (2007) identify the ethical commitments and guidelines for organizations communicating in risk-related contexts: honor the importance of ideas and meanings, maintain transparency, build trust through community engagement and collaboration, acknowledge uncertainty, and enact local narratives.

As the lessons of the Green Revolution demonstrate, science and citizens can work together to craft a common future. Together, policy and field experience help develop new research and policy directions which encourage innovation and local knowledge, while honoring scientific research and social values. Agriculture requires the involvement of local voices in decision making, supporting programs that promote “participation by” communities instead of “doing for” communities (Bunch, 2000, p. 26). Connecting citizens to agricultural issues creates a system of shared values and ownership that reinforces accountability; responsible dialogue creates a discourse of responsible choices.

### **International agricultural development and environmental discourse**

International development practitioners must be able to communicate effectively with a variety of audiences about the environment and natural resources. In the age of greenwashing, rhetorical strategies employed by corporations and governments mask questionable environmental practices (Laufer, 2003). Creating and maintaining ethically sound, socially relevant, politically effective, economically feasible, and environmentally responsible discourse is imperative. Complicating this matter further is the role of international trade policies which interfere with the governance of natural resources on the local level without requiring any form of environmental responsibility to accompany capital enterprises (McCarthy, 2004).

International development professionals working in contexts where economic and environmental goals are often in conflict embrace a number of identities and discourses when working with sponsoring agencies, government officials, scientists,

community organizations, and farmers (Rogers, 2003). Complicating this is the necessity of community-level motivation necessary for development. Yet, local leadership often lacks the capacity for service provision (Bontenbal & van Lindert, 2011). Appropriate and effective communication is often facilitated by development workers functioning as boundary spanners between research/funding agencies and local populations.

International development programs aid in capacity building, community development, leadership training, transparency, stimulating socio-economic development, and technological implementation and input.

### ***Communication strategies in international agricultural development***

One-way communication flow, often found in “expert” knowledge situations (Kothari, 2005), may be less effective in multicultural and intercultural contexts. As an alternative, collaborative methods are gaining prominence as the preferred approach (Clarke, 2003). Intuitively, communicators know that diffusing information requires more than explaining. Ineffective communication increases the likelihood of adoption failure in development (Clarke, 2003; Rogers, 2003). Farmers and scientists from developing countries understand the ecological and social contexts of local development initiatives as well as the constraints and resource limitations. Many international development partnerships emphasize best practices, experiential learning, and knowledge transfer, which is a reminder of the importance of collaborative communication strategies in program success (Bontenbal & van Lindert, 2011).

Introductory public speaking classes offer a unit, if not an entire week, devoted to the importance of audience analysis in communication. Put simply, one must know who

one is talking to and about from a variety of perspectives. More than simple demographic analysis; elements of culture, political structures and function, environmental values, historical tradition, gender roles, and risk assessment all work to create the larger context in which communication in international agricultural development occurs. Participatory approaches to agriculture in developing nations (Bunch, 2000; Bunch et al., 2010; Freire, 2008; Narayanasamy, 2008; Pretty, 1995; Quintana, 2004) help to tailor research agendas and communication strategies to meet the needs of farmers. Despite the challenge of securing venues for interaction and creating new communication formats local stakeholder involvement in the process is beneficial (Jakku & Thorburn, 2010). Participatory approaches promote the inclusion of local knowledge into the development initiative, helping balance the relationship between external agent/agency and community. Aid agencies from developed nations working in developing countries bring different knowledge and values of local ecosystems and production capabilities.

### ***The challenges of globalization and democratic processes***

The shifting global context of environmental awareness creates more tension as global conflict over natural resources increases. Trade policies and some development initiatives prioritize the economic value of nature over the cultural value of nature (McCarthy, 2004), as a numeric financial value translates to a quantifiable global understanding much more easily than subjective socio-cultural values. Those working in communities where the transition to globalization in the wake of neoliberal trade

agreements means an increased threat to local values and knowledge should recognize how this tension may play into development programs and relationships.

The civic aspect of development is a reminder that much of the environmental resource conflict in agriculture is rooted in elements of democratic participation as it intersects with everyday life (Hassanein, 2008). Existing programs, whether administered directly by state agencies and governments or by NGOs, focus on collaboration, education, deliberation, and cooperation and reflect a form of civic innovation in regards to participation (Hassanein, 2008). The goal of the programs is to transform process into practice. Klerkx, Aarts, and Leeuwis (2010) explained that “innovation is dependent on the outcome of the interactions between many self-organizing actors, which makes it a highly unpredictable process” (p. 398). This unpredictability of agricultural phenomenology stems from aspects of the process, such as educational levels, previous experience with extension and nonprofit organizations, and willingness to adopt new practices.

A phenomenological perspective considers the active and embodied processes of life that incorporate citizens, natural resources, organizations, and the state in agricultural development programs (Carolan, 2006). The complexity of contexts in which interactions occur contributes to the variety of development approaches utilized around the world. Contextual factors necessitate taking local limitations and advantages into account, and must communicate accordingly with stakeholders. Agricultural development initiatives can reduce uncertainty by designing programs that prioritize aspects of environmental communication as the means to connect with local

communities and tailor program design. The challenge of communication in environmental conflicts, as T. R. Peterson and Franks (2006) described, is to “enhance collaborative potential without ignoring material realities” (p. 423). This is the foundation of many approaches to agricultural development, working with local populations while being aware of resource limitations such as finances, environmental health, and human resources.

### **Agricultural development, environmental communication, and public participation**

Opportunities to unite environmental communication with agricultural development are reinforced in the realm of public participation, as it influences policy. As G. B. Walker (2007) stated,

Public participation is a seminal concept in the environmental policy decision making and natural resource management arenas. As an area of research and practice, public participation ranges from relatively formal activities like public hearings and litigation procedures to informal events such as community workshops and field trips. (p. 106)

Contemporary agricultural development initiatives operate within a number of local structures. Each program meeting and site visit becomes an opportunity to aid in increasing public participation that amplifies farmer voices to local governments and other development partners. Utilizing approaches that consider environmental communication will help international agricultural development practitioners identify and disseminate relevant information in appropriate contexts while building a foundation for long-term participation.

A prominent connection between environmental communication discourse and international agricultural development is the role of time and the rhetorical function of *kairos*. *Kairos* is the specific moment, literally and intellectually, where speech and action are opportune in order to support change and empowerment in social action (Herndl & Lincona, 2007). Giddens (1984) posited that examining the relationships between structures is the study of “social practices ordered across space and time” (p. 2). Miller (1994) addressed *kairos* within the discourse of technological change and how continuous change has constructive power. She explained, “*Kairos* tells us to look for the particular opportunity in a given moment, to find – or construct – an opening in the here and now, in order to achieve something there and then” (p. 83). Conceptualizing *kairos* in this manner constructs the locus of agency as four-dimensional in space/time, and aids scholars in the positioning and repositioning of identity within the public sphere. The onus of *kairos* is to highlight relationships between the past, the present, and the future, focusing on the nature of change over time.

It is *kairos*’s connection of time to practice that makes aspects of environmental communication particularly relevant when strengthening the foundation of international agricultural development. As Termeer et al. (2010) noted, increasing partnerships between sustainable agricultural initiatives and development programs introduces new challenges to ideology and values, political relationships, financial dependence, social trust, and cultural and physical distance. Timeliness of an intervention, and the window of opportunity in public participation are important in ensuring program success. Development practitioners must consider the level of local interest in a particular

innovation when promoting diffusion. Approaching an issue after public interest wanes may result in less participation. In environmental communication initiatives, this could mean missing a public comment period regarding nuclear dumping. In agricultural development programs, this could mean missing the growing season or losing an available population to migration or famine.

While many aspects of *kairos* demonstrate necessity in the moment, an alternate emphasis on *kairos* undergirds aspects of program sustainability and success over time. The “moment” of opportunity could translate to a 3-year trial period that is set up by new policy. Bunch (2000) offered his conceptualization of timeliness to incorporate the time necessary to make decisions that are sustainable over time; “time to overcome unexpected obstacles, time to make sure that the technology to be used is as appropriate as possible, and above all, time to choose and develop good leaders” (Bunch, 2000, p. 77). Accomplishing this is done not only through “boots on the ground” determinism, but through a variety of approaches that build the infrastructure for sustainability through people, programs, and policy.

### **Opportunities to address development conflicts**

Multi-disciplinary efforts linking theory, practice, research and policy are the most likely opportunities for resolving development conflicts while promoting sustainability (Hassanein, 2008; Jakku & Thorburn, 2010; Middlemiss, 2011). Both social and political considerations require thoughtful engagement with local communities (Sherwood & Uphoff, 2000). As G. B. Walker (2007) explained, “pluralistic public participation processes encourage negotiation of shared meanings and



interpretations in order to generate shared understanding” (p. 102). De Pinto et al. (2010) highlighted the potential of environmental policy as a means to alleviate poverty for small farmers in developing countries by creating investment in rural communities and incentivizing farming methods. Some examples of incentives include paying farmers for conserving watersheds, reducing erosion, reforestation, and sequestering carbon through soil management. Incorporating local knowledge regarding land management, ecology, soil characteristics, and social dynamics can aid in program planning. Development professionals considering these factors increase the likelihood of program sustainability through improved communication between local and program leadership (Agrawal, 2005; Jakku & Thorburn, 2010). Ignoring or neglecting local perspectives may not meaningfully address relevant issues, and runs the risk of alienating community members by further entrenching environmental opinions in existing hegemonic power relationships and institutions, which undermines the capacity for effective change (Brulle, 2010).

### **Innovation-diffusion theory in contemporary agricultural development:**

#### **Foundation and criticism**

The diffusion of innovations model (Rogers, 2003) is a foundation for many programs promoting change in development interventions at the local level. As a seminal concept in agricultural education and development, the diffusion of innovations model provides insight into how change happens. Rogers (2003) defined an innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (p. 12). Influenced by anthropological observations at the turn of the twentieth

century, sociologists and economists in the 1920s and 1930s formulated studies that explored diffusion's concepts (Katz, Levin, & Hamilton, 1963). After briefly falling out of fashion as a research focus, scholars in the field of rural sociology re-engaged the concept of diffusion to examine the communication and adoption of new farm practices (Katz et al., 1963). In the past fifty years, studies of the diffusion of innovation have appeared in research from the disciplines of communication, geography, marketing, and public health and medical sociology, to name a few (Katz et al., 1963; Rogers, 2003).

While this concept is one that influences many studies in a variety of disciplines, it is valuable to consider its criticisms and limitations in order to continue developing the theory and consider alternative approaches. Rogers (2003) explained how new ideas permeate a social system via communication channels over time. Diffusion research offers a common ground to academics in a number of disciplines using a variety of methodologies. As a means to understand change, diffusion research functions “like the use of radioactive tracers in studying the process of plant growth: it helps illuminate processes” (Rogers, 2003, p. 104). How quickly an idea spreads depends on a number of factors, which Rogers articulates as relative advantage (benefits over the status quo), compatibility (contextual fit), complexity (perception and adopter appropriateness), observability (by others), and trialability (ease of experimentation). Li and Lindner (2007) further articulate the process by describing similar influential concepts: communication channels, cultural factors, contextual innovativeness, perceived needs, prior conditions, social systems, and socioeconomic factors.

### **The innovation-decision process**

When adopting an innovation, populations consider a series of choices and actions that allow the evaluation of the new idea. This process helps the potential adopters consider whether and how to integrate the idea into existing beliefs and practices. The innovation-decision process model (Rogers, 2003) has five stages:

1. Knowledge occurs when an individual (or other decision-making unit) is exposed to an innovation's existence and gains an understanding of how it functions.
2. Persuasion occurs when an individual (or other decision-making unit) forms a favorable or unfavorable attitude towards the innovation.
3. Decision takes place when an individual (or other decision-making unit) engages in activities that lead to a choice to adopt or reject the innovation.
4. Implementation occurs when an individual (or other decision-making unit) puts a new idea into use.
5. Confirmation takes place when an individual seeks reinforcement of an innovation-decision already made, but he or she may reverse this previous decision if exposed to conflicting messages about the innovation. (p.169)

Depending on the stage of the process, communication channels used to engage populations assume different roles. For example, a mass-media campaign on glyphosate toxicity works at the knowledge stage to raise awareness of the damages of chemical

sprays in agriculture, while interpersonal communication about the advantages of buying organic produce works at the persuasion stage to create a positive image.

Not all members of a population move through the innovation-decision process at the same speed. Each individual moves through the process independently of others. To help categorize each based on willingness to innovate, Rogers (2003) created adopter categories. Innovators are “venturesome” and cope with uncertainty associated with change. As risk takers, innovators help shape the innovation for later adopters. Early adopters are opinion leaders and subjectively evaluate the innovation for their networks. Early adopters give the innovation their endorsement to increase network knowledge of the innovation. Members of the early majority are the “average” member of a system, and exercise deliberate willingness in adopting innovations. The early majority is large enough to normalize the innovation for the population. Once the majority of the uncertainty regarding an innovation is removed, members of the late majority adopt, after considering with caution and skepticism. Finally, the laggards in the system, who are suspicious of change and change agents, adopt the innovation.

Two additional factors contributing to an innovation’s adoption are the function of diffusion networks, and the role of change agents. Diffusion networks decrease uncertainty about an innovation, increasing the likelihood of critical mass in adoption (Rogers, 2003). Critical mass is the “point at which enough individuals in a system have adopted an innovation so that the innovation’s further rate of adoption becomes self-sustaining” (Rogers, 2003, p. 363). Information travels through in different flows of communication, usually guided by opinion leaders with extensive interpersonal networks

(Oleas, Dooley, Shinn, & Giusti, 2010). Opinion leaders are a valuable link between change agents and later adopters. Change agents operate on behalf of a change agency to develop the need for change, establish information relationships, diagnose problems, motivate change within individuals, promote action, support and maintain adoption, and create an environment where the system sustains the innovation without the change agent.

### ***Criticisms of diffusion research***

Reflection on assumptions, biases, and weaknesses is a valuable and necessary activity in the growth and development of a research field. While used in a variety of fields, the diffusion of innovations model has limitations that may counteract its efficacy. Rogers (2003) outlined the primary criticisms of diffusion research, which include the pro-innovation bias, the individual-blame bias, the recall problem, and the issue of equality.

#### ***The pro-innovation bias in diffusion research***

The pro-innovation bias of diffusion research is the inherent belief that all members of a social system should adopt a particular innovation. Accompanying this idea is the belief it should be adopted rapidly and without experimentation. Rogers (2003) explained,

The bias leads diffusion researchers to ignore the study of ignorance about innovations, to underemphasize the rejection or discontinuance of innovations, to overlook re-invention... and to fail to study antidiffusion

programs designed to prevent the spread of ‘bad’ innovations (crack cocaine or cigarettes, for example. (p. 107)

The pro-innovation bias has increased the research knowledge pertaining to adoption speed and rejection.

Sveiby, Gripenberg, Segercrantz, Eriksson, and Aminoff (2009) reviewed a set of articles with “innovation” in the title that focused on the study of undesirable consequences of innovation. Their search returned hundreds of thousands of articles with innovation in the title, but only 26 on the unintended or accidental consequences. Based on analysis of the studies’ hypotheses, they found the most significant factors limiting the consideration of consequences included pro-innovation bias and the interests of funding agencies, which correlates with the causes Rogers (2003) identified. This limitation contributes to the singular consideration of an innovation’s anticipated and advantageous consequences, and challenges the representative veracity of the research (Sveiby et al., 2009).

To counteract pro-innovation bias, Rogers (2003) suggested five strategies that inform and correct past approaches. First, alternative research designs that engage adopters at several points in time over the course of the diffusion bias. This permits researchers to consider reasons for discontinued use and to investigate less-successful innovations. Second, in selection of innovations for study, researches should be more critical and thoughtful. He suggests comparative analyses of failed innovations with successful innovations within the same population. Third, discontinuance, re-invention, and rejection may be rational in the minds of individuals considering adoption.

Therefore, it is the job of the researcher to “adequately understand the individual’s perceptions of the innovation and of the individual’s situation” (Rogers, 2003, p.114).

Fourth, the broader context of the innovation’s diffusion should be investigated in order to consider cultural, political, and technological appropriateness. Finally, Rogers advised that increasing understanding of the role of incentive and motivation for adoption.

*The individual-blame bias in diffusion research*

When an individual is held responsible for the problems he or she experiences, when the system in which the individual operates is a factor is an example of the individual-blame bias. Factors causing this could be the views of the change agency, the mutability of personal circumstance, and/or the accessibility of individuals for study as compared to systems. Rogers (2003) explained,

...seldom is it implied in diffusion research publications that the source or channel of innovations might be at fault for not providing more adequate information, for promoting inappropriate innovations, or for failing to contact less educated members of the audience who may especially need a change agent’s help. (p. 121)

He notes that individuals in later phases are sometimes blamed for their lack of adoption, despite the possibility of the choice being a rational one based on resources and opportunity. Later adopters are often stereotyped as uneducated and resistant to change, which Rogers warned may become a self-fulfilling prophecy. Similarly, the bias functions on both ends of the spectrum. While those on the later end of the continuum may be perceived as lacking information or perspective, attributing positive

characteristics to early-phase adopters may not be accurate. For example, in their study on faculty adoption of web-based distance education at China Agricultural University, Li and Lindner (2007) challenged Rogers' assertion that formal education has a positive impact on adopter behavior.

Overcoming individual-blame bias calls for four primary strategies (Rogers, 2003). First, by focusing on other units of analysis other than individuals, analysis of interpersonal networks and communication behaviors offer increased understanding of response to innovation. Second, researchers should also be critical when evaluating the causes of a social problem. Third, all participants should be included in understanding how the diffusion occurs. Finally, structural issues affecting social and communication factors should be evaluated to see how influence functions.

#### *The recall problem in diffusion research*

Pinpointing the exact juncture at which an innovation is adopted is difficult. A primary research weakness is that it relies upon self-report data, where adopters need to recall and recount their personal timelines for adoption (Rogers, 2003). This contributes to challenges in determining the cause of adoption, and reminds practitioners of the importance of *kairos*.

Research strategies that mitigate recall problems include field experiments that evaluate potential adopters and rejecters throughout the diffusion process, or in the case of some innovations, at the specific point of adoption. Innovations that diffuse rapidly can be evaluated for their emphasis on temporal factors. Rogers (2003) suggested using alternative sources for information about time of adoption such as records kept by



doctors regarding immunizations and prescriptions or computer records denoting moment of exposure. Finally, Rogers (2003) stressed the importance of pretesting survey questions and using highly skilled interviewers to insure rigorous data collection.

### **The issue of equality in the diffusion of innovations**

Rogers (2003) explained that studies of equality in diffusion research show that the gap between high and low socioeconomic status increases, especially in development initiatives. He stated, “The key intellectual issue here is the cultural appropriateness of social science research as it originally grew to strength in the United States, and was then applied under very different sociocultural conditions in developing nations” (p.131). The dominant development paradigm of economic growth, technology, centralized planning, and addressing causes of underdevelopment fit the diffusion paradigm. However, contemporary development imperatives include participatory strategies, social change and justice, community health and poverty reduction plans.

Lev and Acker (1994) reviewed alternative approaches to technology development and adoption in international agriculture including technology transfer/extension, industry-led technology development, and participatory action research (PAR). Of these three, only PAR assumes that all members of a system can contribute critical and varied types of knowledge to the development of technology. They highlighted the work of the NGO World Neighbors, which supports farmer experimentation and local knowledge as a resource in the development and innovation process (Bunch, 2000). This exemplified engaged learning in a non-hierarchical

structure in order to raise consciousness in historically oppressed populations (Freire, 2008).

The dominant theme of the criticisms of diffusion research is the relationship between privileging the change agent/agency and aligning with local values. As Mattocks and Steele (1994) noted,

The agricultural extension literature is infected with language that reflects the one-way paradigm. Even though the most informed writers are making a well-intentioned attempt to incorporate more feedback mechanisms into their technology transfer model, they are unable to move away from their top-down thought processes. (p. 54)

They highlight the opportunities and advantages of NGOs working as change agencies, especially for governments. NGOs often prioritize grassroots participation and value participant feedback. The decentralized method helps avoid the pitfalls of the expert structure Kothari (2005) addressed while still utilizing some of Rogers's (2003) concepts of innovation.

Values of communication and power vary among cultures, as do knowledge management strategies. In Rogers' (2003) discussion on indigenous knowledge systems, he discussed the error of change agents to perceive potential adopters as "blank slates who lack any relevant experience with which to associate the new idea" (p.254). To ignore the presence of local knowledge is to "court disaster" (p.256) while introducing an innovation. Kothari (2005) expanded on this concept in discussing the professionalization of top-down

development structures that silence local voices. Bottom-up strategies employed by some NGOs can be collaborative and diagnostic at the same time. NGO networks frequently include government extension and research organizations, universities, and external communities and organizations. These networks may foster opportunity for innovation evaluation and diffusion, as well as collaboration (Mattocks & Steele, 1994).

### **Knowledge management and contexts**

For organizations working in international agricultural development, there is tension when managing knowledge from outside sources and local populations concurrently. An overview of pertinent knowledge management literature helps establish the definition of knowledge and the functions of knowledge management within organizations. Scholars studying knowledge management articulated the difficulty in defining what knowledge is (Alavi & Leidner, 2001; Bhatt, 2001; Mårtensson, 2000). Underlying every question about the nature of knowledge is a competing logic about the role of value. Bhatt (2001) argued that knowledge is an “organized combination of data, assimilated with a set of rules, procedures, and operations learnt through experience and practice” (p. 70). Knowledge is an intangible resource for organizations that evolves organically rather than mechanically (Allee, 1997).

Knowledge is the end result of data and information combining to demonstrate a level of synthesis. It is this synthesis that must be constructed into a tangible form and shared by individuals and organizations. Development of the knowledge management approach was led by Hubert St. Onge at the Canadian Imperial Bank of Commerce to

devise how to make an organization's tacit knowledge explicit (Allee, 1997). Once knowledge is articulated effectively, it can be shared with others and improved upon. It is necessary to understand the formation of knowledge as well as how individuals and organizations learn to use it. In contemporary settings, the context of knowledge management is marked by the cultural hybridity of globalization (Kraidy, 1999).

Allee (1997) outlined twelve principles guiding knowledge management, based on the basic foundation and principles of knowledge. An understanding of these principles is helpful to frame discussions of how innovations are packaged as knowledge. First, knowledge is “messy” (p. 72) and is often difficult to isolate from conditions of experience. Second, “knowledge is self-organizing” (Allee, 1997, p. 72). Third, “knowledge seeks community” (p. 72) and grows from the involvement of those who value and innovate the content of the knowledge. The interaction of one person or organization's knowledge with others is important to this principle. Fourth, knowledge evolves via language. This principle highlights the role of thoughtful attention to language when describing experience. Fifth, “the more you try to pin knowledge down, the more it slips away” (p. 72). Codification of knowledge is valuable, but the nature of knowledge relies on creativity, change, and the evolution of risk. Sixth, trying to exert control over knowledge paths and processes may result in wasted resources and energy. Highly adaptable systems and participants are more successful.

Seventh, the changing nature of knowledge also relies on rejecting a “one size fits all” approach. The eighth principle is that “knowledge doesn't grow forever” (Allee, 1997, p. 72). Knowledge can fade or be lost, which may lead to renewal or regression of

content and values. Ninth, the ownership of knowledge is collective, which prevents any single person from being responsible. Tenth, “rules and systems” (p. 72) work against the nature of knowledge. Supportive knowledge systems work organically, allowing knowledge to develop without the control of human categorization, yet within the collective experience of participants. Eleventh, the lack of a “best practice” to advance knowledge means there are multiple approaches to any given knowledge situation. A fluid concept of epistemology offers much to international agricultural development initiatives. Information support should occur on a number of levels, and using a variety of communication channels. Finally, each organization’s definition of knowledge determines how that knowledge is managed for that organization (Allee, 1997).

The importance of working with local communities to develop appropriate knowledge management strategies is evident when considering these principles of knowledge. Organizations must question how to interpret external information for local audiences with regard to context and values. Within knowledge management scholarship, care is taken to delineate between data, information, and knowledge as well as explain their relationships. The epistemology of knowledge management can be understood as follows:

Knowledge is thus the result of cognitive processing triggered by the inflow of new stimuli.... Information is converted to knowledge once it is processed in the mind of individuals and knowledge becomes information once it is articulated and presented in the form of text, graphics, words, or other symbolic forms....For individuals to arrive at the same

understanding of data or information, they must share a certain knowledge base. Systems designed to support knowledge in organizations will be geared toward enabling users to assign meaning to information and to capture some of their knowledge in information and/or data. (Alavi & Leidner, 2001, p. 109)

This epistemology creates a perspective for organizations working in international development to value collaboration and knowledge-sharing between outside participants and local communities. An organization's knowledge management competency can contribute greatly to the level of success when working with others (Allee, 1997).

### **Organizations and knowledge management**

Organizations managing knowledge must consider goals and purposes. What are the driving values for creating and sharing knowledge? How does knowledge create opportunities for sharing? If the goal is to serve a community of farmerworkers, for example, how can farmer knowledge be incorporated with existing knowledge for idea development? How can knowledge be co-developed with farmworkers and within farmworker communities? The humans in the system are the knowledge carriers, but also contribute to the knowledge body individually and collectively based on experience (Mårtensson, 2000). There should be a plan for knowledge sharing within the organization and with key collaborators and stakeholders. Knowledge management's nuances help craft appropriate organizational strategies to confront the influence of globalization, competition, and industrialization.

### **Knowledge management in critical development studies**

A critical perspective helps inform the understanding of how nonprofit and non-governmental organizations function from the standpoint of knowledge management and development studies, respectively. Using critical theory's traditions of understanding, Srinivas (2009) focused on the knowledge required to manage NGOs, ethical consequences of managing and using said knowledge, and the interests (primarily political) that the knowledge serves. Within the critical perspective, knowledge is comprised of unquestioned assertions and the intellectual foundation of the field. The concept of ethics draws from Critchley (2007), whose perspective formulates ethics as the work of self-formation aimed at binding the self to the idea of good. The multiple interests knowledge serves highlight the use of agency as an exercise of power for individuals acting ethically within a given context.

Critical development studies involve the monitoring and evaluating of development programs and strategies with the focus being on improvement and accountability. Those engaging in critical development studies see development work as the means to support long-term change. The emphasis on evaluation allows administrators and managers to quantify what actions are taking place and what outcomes are achieved. Srinivas (2009) referred to this as the technicization of development; the reliance on checklists and procedures to create more formal structures for development interventions. Yet, Srinivas raises the questions, "But to what extent does such technicization actually generate development-related results? And at what cost to the autonomy of the local people who are ultimately the targets of intervention?" (p.

620). A critical perspective when studying NGOs creates opportunities for highlighting resources that encourage the reflective practices of managing. In this way, multiple perspectives are considered. The instruments and approaches may influence adoption and or diffusion of development strategies in the long term. Standardization and “best practices” approaches may be the goal of the organization, yet may discourage experimentation and be counterintuitive to the epistemology of knowledge.

### **Indigenous knowledge management**

Organizations supporting international agricultural development work with rural populations that may manage knowledge in ways that are more aligned with local values, and with strategies that may have emerged as a resistance mechanism. Barrera-Bassols, Zinck, and VanRanst (2006) explained that indigenous populations have diverse social realities, cultures, political histories, and livelihoods. Indigenous populations share two fundamental features, “Their condition as subordinated peoples and their resistance efforts to preserve their cultural identity and historical heritage against cultural homogenization or assimilation” (Barrera-Bassols et al., 2006, p. 123). Indigenous knowledge exists in a dynamic local context and is created and maintained by a culture in a particular setting and time.

By nature, indigenous knowledge is not in opposition to scientific knowledge. However, indigenous knowledge emphasizes the context-dependence of truth, which is in direct contrast to the “context-free, singular truth of science” (Phillip, 2001, p. 7292). Deeply rooted in physical and social environments, indigenous knowledge employs different investigative techniques to understand reality (Agrawal, 1995; Muir, Rose, &



Sullivan, 2010). Despite the ontological conflicts, D. Walker et al. (1999) compared the quality of indigenous and scientific knowledge about the nutritive value of tree fodder and found very few differences. The opportunity for science and indigenous knowledge to evolve together is one benefit of NGO-led collaborations with indigenous populations.

NGOs working with indigenous communities face a number of challenges when considering approaches to evaluating and integrating indigenous knowledge. Unlike the conditions Allee (1997) described; “Workers own the means of production—their knowledge. They can sell it, trade it, or give it away and still own it” (p.71), indigenous communities may have had their knowledge devalued or ignored due to cultural differences, economic imperatives, historical context or political structures (Freire, 2008). In natural resource contexts such as agricultural development, the content of indigenous knowledge may contain environmental and ecological perspectives that have evolved within the culture over time (Arunotai, 2006; Muir et al., 2010). These perspectives guide agricultural, land, forestry, and water management practices within the culture (Mbilinyi, Tumbo, Mahoo, Senkondo, & Hatibu, 2005). These practices, in many cases, are culturally sustainable because they are harmonious with local institutions, lifestyles, and social structures. Over time, the culture’s management of the knowledge and the knowledge itself have evolved based on experience and circumstance (Muir et al., 2010).

### **Knowledge in context: Communities of practice**

Designing collaborations with the Communities of Practice (CoP) model in mind offers a holistic and situated approach to knowledge management based around the core

competencies of members. In a CoP, group members share a common history, identity, and purpose. The focus is on developing specific practices based on the knowledge specialization of the group's members. By envisioning knowledge management collaboration as a community of practice, the evolution of knowledge can be guided by experimentation, adaptation, and negotiation. Knowledge can also be tracked over time, allowing time and space for assessments of growth.

The concept of a "Community of Practice" emerged when organizations and scholars observed that the work habits of members frequently differ from descriptions of tasks found in manuals, training programs, job descriptions, and organizational charts (J. S. Brown & Duguid, 1991). Boud (1999) evaluated the academic profession and implied that informal interactions with peers are chief ways of learning and that the influence of formal training on behaviors can be relatively insignificant. In an attempt to delineate how informal learning and activities evolve within an organization, the concept of "Communities of Practice" emerged as a theoretical means to "refer to the community that acts as a living curriculum for the apprentice" (Wenger, 2004, p. 4). For NGO collaborations, the emphasis on equal status among participants has the benefit of creating a communicative space where all members have equal access to the decision-making process.

Wenger (1998) defined three dimensions of a Community of Practice: domain, community, and practice. Domain refers to the scope of shared knowledge, and how the members identify with knowledge because of their experience. Community is the nature of mutual engagement bringing individuals together, building relationships and trust.

Practice involves building capabilities through action by sharing knowledge resources such as language, tools, storytelling, documents, etc., that serve as a shared foundation of learning. Wenger (1998) asserted that participating with others in a learning community creates informal ties to other members, strengthening the learning and teaching potential of the group. Knowledge generated through this process connects with people's everyday experience (McDermott, 1999).

International collaborations must account for cultural differences in everyday experience. Success relies upon continually evaluating and negotiating strategies. Actions within a community of practice could include problem solving, resource allocation, coordination and time management, documentation, idea development and implementation, and identifying gaps in knowledge (Iverson & McPhee, 2002, 2008). CoPs aid in “understanding the interactive roles of information systems and people and also as a model for understanding how knowledge management is negotiated communicatively between people” (Iverson & McPhee, 2002, p. 260). Or, as J. S. Brown and Duguid (1991) asserted, CoPs are, “a composite concept of learning-in-working best represent[ing] the fluid evolution of learning through practice” (p.41). By accounting for the importance of cultural values in communication and learning, CoPs allow for continual feedback to evaluate and improve knowledge management and content.

Communities develop specific social and cognitive repertoires of behavior and interaction that guide their interpretations of the world (J. S. Brown & Duguid, 1991). Knowing these repertoires also enables an individual to provide proof of membership, allowing her access to the CoPs social exchange of information (Wenger, 1998, 2004).

In learning how to function within a community, she adopts the community's viewpoint and vocabulary. As individuals interact and participate within the community they become active practitioners through collaboration. This aspect of the CoP also highlights the usage of learned local and indigenous knowledge, as members are familiar with what information should be used in what situation. CoPs are able to effectively evaluate the utility of new knowledge that is introduced to the group.

Allee (2000) noted the organizational benefits of CoPs include faster problem solving, retention of membership, development of core capabilities, improvement of knowledge competencies, more rapid diffusion, and opportunities for innovations (p. 8). Community benefits of CoPs include the development of common language, methods and models, expertise and knowledge embedding within the larger population, improved knowledge retention, increased access to expertise, and the sharing of power and influence (Allee, 2000, p. 8). CoPs have benefits to the individuals as well. CoPs provide a stable sense of community, create identities that are learning-focused, develop individual skills and competencies, help keep members' knowledge current, and offer opportunities and challenges to collaborate toward a larger purpose (Allee, 2000, p. 8).

The context-specific nature of CoPs is also an important consideration for NGO collaborations. CoPs, through the process of trying, adopting, accepting, and rejecting practices, create local knowledge and develop practices that may differ from CoPs with the same function in other local contexts (Iverson & McPhee, 2002, 2008). As joint enterprises are negotiated, mutual accountability is created, enabling an environment where members are actively invested in the welfare of the community. This connects the

community in time and space via the purposeful construction of knowledge within their communicative process (Cassidy et al., 2007).

Allee (2000) articulated the principle of fair exchange in knowledge management. Fair exchange addresses if people feel they receive fair treatment for the creativity, experience, innovation, intelligence, and passion they bring to the organization. Knowledge creation, validation, presentation, distribution, and application in a CoP occurs through collaboration and sharing. For NGO collaborations that function as CoPs, the concept of fair exchange is a priority in order to create consistency with member values and respect for all participants.

### **The 7Cs ethical model of communication for international agricultural development**

In responding to the conflict between ensuring the world's food security and preserving natural resources to support future generations, careful attention to discourse is required. Jacobson and Storey (2004) defined discourse as “negotiation oriented toward agreement over questioned validity claims” (p. 103) regarding the physical, social, and subjective worlds. Appropriate discourse frames conflicts in terms relative to their contexts. For international agricultural development, discourse is a delicate undertaking. Competing claims offer conflicting perspectives on best land use practices, delivery methods, and support structures. The ultimate goal of helping “people identify and use knowledge to help themselves” (Shinn, Wingenbach, Lindner, et al., 2009, p. 83) requires a set of ethical considerations for practitioners to consider when engaging multiple stakeholders. My position in formulating the 7Cs ethical model of

communication is to provide an alternative to the behavior-category based labelling of community members to create a context for development (Rogers, 2003) in favor of ethical considerations that are community-defined that expand contexts for development. Not to be confused with the “Cs of communication” (Mindtools.com, n.d.) or the “Seven C’s [sic] of Effective Communication” (Management Study Guide, n.d.), my model does more than give a rudimentary overview of basic communication practices to guide written communication and presentations. The 7Cs ethical model of communication lays out a framework of communication ethics that generate profound opportunity in development scenarios for program planning and evaluation.

Practitioners working in international agricultural development have the task of generating new ideas and initiatives. Creativity is necessary in order to combat what Lakoff (2010) referred to as the “hypocognition” of the environment and competing resource claims. He explained,

Hypocognition is the lack of ideas we need. We are suffering from massive hypocognition in the case of the environment. The reason is that the environment is not just about the environment. It is intimately tied up with other issue areas: economics, energy, food, health, trade, and security. In these overlap areas, our citizens as well as our leaders, policymakers, and journalists simply lack frames that capture the reality of the situation. (p.76)

Using the values of environmental communication as a foundation, I offer the following seven ethical imperatives and their functional guidelines for international agricultural

development practitioners to consider: collaboration, culture, community, conservation, capacity, care, consistency. This model, as developed in the following chapter is designed to help practitioners build strong foundations for international agricultural development initiatives.

CHAPTER III  
FOSTERING ETHICAL COMMUNICATION IN  
INTERNATIONAL AGRICULTURAL DEVELOPMENT INITIATIVES:  
THE 7Cs ETHICAL MODEL OF COMMUNICATION

The future of agricultural development initiatives rests on the timeliness of interventions in rapidly shifting ecological and sociopolitical environments. In this chapter, I propose a set of ethical considerations to inform communication strategies and program priorities in international agricultural development: collaboration, culture, community, conservation, capacity, care, and consistency. The strategies proposed address interaction from a pragmatic perspective, focusing on the creation of discourse surrounding the program to improve organizational communication and strategies used in international agricultural development. Each of the ethical constructs of the model is derived from the principles of environmental communication with consideration for indigenous knowledge management principles inside the context of international agricultural development.

The method for determining these constructs included reviewing literature pertaining to critiques of international agricultural development theory and practice, environmental communication and knowledge management. Once an understanding of the literature was ascertained, I determined how environmental communication and knowledge management strategies could improve upon the critiques of international agricultural development. From that analysis, I devised seven ethical constructs that contribute to the foundational body of knowledge in international agricultural



development. The parameters and particulars of these seven constructs are determined by local perspectives, and create a collaborative bottom-up epistemology. Embracing local values and vocabularies into program design and implementation increase chances of long-term sustainability.

The 7Cs ethical model of communication provides a foundational framework to consider throughout the design and implementation processes of international agricultural development programs. It is designed to help development agents negotiate potential areas of tension in local communities. This model highlights factors that address human relationships with the environment, community relationships with the state and development agencies, production of discourse, perspectives of development agents, interpretation of power relationships, community resources, and intervention planning.

It is not my contention that contemporary agricultural development initiatives are engaging in incorrect or detrimental communication. Alternatively, my position is that we can embrace vocabularies utilized by the communities we serve in order to improve inclusion of local knowledge into program design and implementation. Attention to discourse used within communities and communicated from agencies/NGOs is helpful in constructing a program with a higher chance of sustainability and adherence to local behaviors.

I outline seven ethical considerations in this model for developing and evaluating discourse and programming: collaboration, culture, community, conservation, capacity, care, and consistency. Individually, these “7Cs” are ethical foundations found

throughout environmental communication and indigenous knowledge management literature. Together they formulate a foundation for ethical discourse and practices in international development initiatives. As a theoretical foundation, it can also guide communications planning and evaluation of organizational discourse and engagement.

### **The 7Cs ethical model of communication**

#### ***The ethic of collaboration***

Collaboration is the spirit and practice of all participants working together as equals to make decisions. Collaborations can unite government representatives, NGOs and nonprofits, universities, community groups, farmers and citizens (Sherwood & Uphoff, 2000). Each person involved in the idea generation, strategizing, and decision making process should have all of the pertinent information regarding the topic at hand available. The collaborative approach is different than the diffusion of innovation method, because of the value that all participants should understand and agree to all steps in the decision making process. Antholt (1998) explained, “The diffusion model obscures the fact that farmers are innovators, not just passive receptacles of information. This perception of farmers as receptacles of information limits the ability of extension institutions to be farm and farmer-oriented” (p. 355). Collaborations cannot foster division, concentrate energy on outside participants, exclude isolated local populations, discriminate based on class or indigenous identity (DiAquoi, 2011); Attention must be paid to language and to the relationship between science and culture. Further, collaboration works to diminish the effects of corruption by promoting group accountability and transparency.

Addressing natural resource conflicts through policy approaches is difficult due to the technical nature of solutions that address different perspectives and values (Daniels & Walker, 2001; Sidaway, 2005). In order to mitigate these concerns, Daniels and Walker (2001) developed the technique of collaborative learning to increase the potential of value sharing and social learning through participation. Policy created with the guidance of collaborative learning is based upon values of conflict management, learning theory, and systems thinking. Policies are designed with existing realities in mind and draws upon public values to guide legal and economic decisions. Improving social deliberation on environmental topics outside political and economic frames acknowledges social and cultural dimensions' presence in decision making.

Using collaboration as an ethical foundation for an agricultural development organization's goals can guide the creation of systems that endure after outside aid is no longer present. The material components of an organization are nothing more than an assemblage of individuals with a common goal. Ideally, an organization should embrace the concept of unity development through leadership (Freire, 2008). An organization should resemble a collaborative educational process in which authority and freedom are established through learning to transform a particular context. Each member of the organization becomes an advocate for the organization and develops her own potential for future leadership endeavors. Each aspect of the individual development process within an organization creates a system that functions to generate specialized knowledge.

Bhatt (2001) described the collaboration of organizational knowledge and highlights the importance of time, “through unique patterns of interactions between technologies, techniques, and people, which cannot be easily imitated by other organizations, because these interactions are shaped by the organization’s unique history and culture” (p. 70). Knowledge management in organizations occurs in five collaborative phases that promote learning, unlearning, reflecting, and relearning. The phases are: knowledge creation, knowledge validation, knowledge presentation, knowledge distribution, and knowledge application (Shin, Holden, & Schmidt, 2001).

Agricultural initiatives that embrace a collaborative learning approach increase public deliberation on issues and honor the nuances of decision-making. Deliberative structures that address environmental conflicts from multiple perspectives help balance the effects of expert management which can isolate responses from all affected communities (Kothari, 2005). Participants in collaboration are brought together to freely discuss concerns, opportunities, limitations, and expectations. Collaborative efforts conceptualize learning as an experiential process where interaction and reflection are used to navigate conflict. Using collaborative techniques increases the knowledge base of policy leaders due to the interaction with scientists and farmers. As a result, relationships between stakeholders are emphasized and feedback is shared in a flexible and dynamic context.

Environments supporting continuous learning keep channels of communication open and make tangible the role and position of knowledge. Knowledge management strategies in collaborative efforts may utilize knowledge mapping as a tool to aid

communication. Knowledge mapping provides a visual representation of who has what knowledge and where she is located (Alavi & Leidner, 2001). When working in collaborative partnerships knowing where knowledge resources are located is imperative, especially in international contexts (Ramos & Chesler, 2010). Tangible support structures aid in the exploration of knowledge and include communication channels such as email, physical structures such as community centers or meeting locations, technology support, equipment and tools (Allee, 1997). Feedback is necessary in order to gauge the reception and integration of knowledge, and may be conducted through evaluation measures that seek to trace and suggest improvements for knowledge flow.

Collaboration meshes well with existing methods of Participatory Rural Appraisal (PRA) used in international agricultural development. PRA's goal is to prioritize local experience, knowledge and ownership of developments in order to strengthen local capacity and increase idea exchange between outside facilitators and internal participants (Narayanasamy, 2008). Values of PRA include sustainability, goal setting, cooperation, learning, and leadership development (Narayanasamy, 2008). Both collaborative leadership and PRA reject the idea of a "one size fits all" approach to problem solving, which is a foundation of environmental communication (Cox, 2006) and international agricultural development (Eicher, 1998; Narayanasamy, 2008). Combining approaches offers policy and program practitioners the chance to learn from each other, as all stakeholders begin the process in conversation together. This increases the opportunity to utilize multiple perspectives to design solutions.

International non-governmental organizations (NGOs) supporting agricultural development can use collaborative learning strategies to unite stakeholders from different countries to consider possible improvements in regional development. Although constrained by legislation structures (Tevelow, 2004), NGOs can build social capital through networks that cooperatively build trust between local communities and scientific knowledge. For example, an NGO working in a developing country can unite local experts and leaders with scientists and extension professionals to consider how indigenous knowledge can benefit development programs, improving long term sustainability. Another approach would be connecting small famers with local leadership to evaluate water usage and the potential for well drilling in communities with limited water access. While NGOs cannot replace good local governance, they can effectively facilitate sustainable decision-making processes that improve the participation capability of all citizens.

When considering the ethic of collaboration, the following critical questions are relevant:

Critical Questions for The Ethic of Collaboration:

1. Do all stakeholders have access to the relevant information?
2. Are all stakeholders involved in the decision making process?
3. How does process communication contribute to creating and maintaining positive social relationships within the collaboration?

Careful attention when analysing the use of the ethic of collaboration helps to evaluate the participatory elements of the program to ensure all stakeholders are accounted for in the decision making process.

### ***The ethic of culture***

From an epistemological perspective, culture plays a valuable role in understanding how and why local communities value to knowledge, as well as what constitutes knowledge. Historically, culture is the root of epistemology for agricultural knowledge (Amini, 2008; Lopez, 2007; Shiva, 1991). Instead of using Maslow's hierarchy as a foundation to determine cultural values based on the necessity of eating or the privilege of land ownership, other aspects of daily living can be used to describe culture. Rothenbuhler (1998) argued that daily practices of living that are conscious, voluntary, not recreational, collective, social, customary, recurring, and pertain to the elemental aspects of life are rituals. These rituals comprise the value structure of daily experience that creates the foundation of culture. Rituals often take the form of communication without information that translates into foundational practice over time. *Campeño* and traditional agricultural knowledge is primarily passed down through family and community members instead of via formal educational structures. This practice embodies the culture of communities served through agricultural development initiatives. The subsistence lifestyle of many indigenous farmers is fraught with formal or as Rothenbuhler (1998) would argue, "serious" rituals that contribute to secular (political, economic, family) issues, that are structurally identical to practices of faith. These behaviors morally regulate secular affairs and guide many aspects of decision

making, and rely on the shared acceptance that patterned behavior is meaningful and effective.

Culture is comprised of the beliefs, rituals, practices, and identity associated with a particular group (Rothenbuhler, 1998). The existing value structures within the culture of a particular locality influence behaviors found in decision-making, collaboration, and diffusion processes. Information throughout the development project should be presented in ways that are easily understandable by all parties as well as respectful of the local culture. The increase in globalization calls for greater attention to local cultural values, with regard to communication and technology.

International agricultural development initiatives should begin by recognizing the nature of communication in intercultural contexts. Outside workers and organizations coming into a community must recognize potential differences in value and communication style when planning development interventions. As globalization spreads, opportunities for international collaborations increase. Technology's influence on communication means there are fewer physical barriers to communication than ever before, amplifying the relevance and importance of cultural mindfulness. Local communities communicate differently than development agencies and often lack education and technology. An understanding of cultural values in relation to technology and information networks makes a difference. Specifically in international agricultural development, the role of technology is considerable. Some cultures may not adapt or innovate technology in the way expected by diffusion agents. Each group will also measure success differently, so a shared understanding of what desired outcomes are



possible and preferred is necessary. Additionally, time plays a prominent role, because crop growth happens within the seasons, but the cultural concept of time varies between cultures and may affect communication.

Community values and cultural differences extend to concepts of nature. Placing an intrinsic (not financial) value on nature forms the basis of indigenous culture, as nature and its resources provide a means to survival. Nature is not merely a physical space, but a contributing partner in human existence. Haraway (2004) postulated that nature is a *topos*, or place for consideration of commonality. Contemporary development initiatives focus on nature as a tool for providing financial income, nourishment, and as a resource available for human consumption. This perspective deconstructs natural systems into relationships based on material output. The values of development culture in the post-Green Revolution era place an emphasis on yield over long-term population growth and climate change models. Initiatives working with rural populations often prioritize material values without properly determining if they mesh with local cultural values. As Holt-Gimenez (2006) argued,

The reasons behind the marginalization of farmer-driven sustainable agricultural development have to do with the dominant political and economic structures that prioritize the free movement of international finance capital, economic growth in gross national product (GNP), and conventionally grown agricultural exports rather than food and livelihood security or sustainable production. (p. xvii)

The epistemologies of both development and local culture stem from different perspectives on how to use shared human space. The difference shapes beliefs and practices that determine what solutions are feasible.

The loss of the commons is where the importance of culture becomes clear for communication in international development initiatives. Development workers are actively solving the problems of the commons, introducing new knowledge sources and resources into local communities that better enable citizens to make decisions regarding use of their commons. Conversely, development initiatives that prioritize different values of land distribution and management risk culturally isolating the communities expected sustain innovations. Without appropriate consideration of the ethic of culture, organizations working in international contexts risk isolating the communities they seek to improve.

Organizations and individuals working in development should seek ways to address the cultural dimensions of initiatives. Questions remain on best practices to advise use of the commons from a perspective of culture. Hardin (1968) warned against trying to persuade people to care about the well-being of others which creates another epistemological quandary for development. He argued that the rhetoric used to conjure up conscience in others can use guilt dangerously against non-cooperators. The cultural role of power can work for and against development workers communicating with local populations, and should be a determining factor when planning diffusion strategies. A cultural misunderstanding of power has the potential to unseat the entire development initiative (Hardin, 1968).

Thinking about the role of the environment highlights the importance of culture within international agricultural development initiatives. Programs increasing the use of agriculture's detrimental inputs often increase environmental degradation and pollution. As Hardin explained, the concept of private property favors pollution:

In a reverse way, the tragedy of the commons reappears in problems of pollution. Here it is not a question of taking something out of the commons, but of putting something in--- sewage, or chemical, radioactive, and heat wastes into water; noxious and dangerous fumes into the air, and distracting and unpleasant advertising signs into the line of sight.... The rational man [sic] finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Since this is true for everyone, we are locked into a system of 'fouling our own nest,' so long as we behave only as independent, rational, free-enterprisers. (Hardin, 1968, p. 1245)

Each culture places a value on the environment. Agrawal (2005) referred to the environment as a conceptual category organizing daily life, and beliefs and thoughts about the environment are formulated responses to circumstances and experiences with which the agent has little control. He developed the idea of environmentality to explain a framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned about the environment. As communities engage more with decision-making about the environment, the importance of local culture

emerges in the development initiative. Development initiatives focusing on elements of culture have an advantage.

Special attention to social practices can aid in theorizing in ways more attuned to local consciousness and support long-term innovation sustainability. Another element to consider within culture is the role and presence of corruption. Determining corruption's role within a culture- its role locally, how it operates, who benefits, where it occurs, etc., is valuable for organizations partnering in local communities. Corruption may take different forms within different cultures, and presents particular challenges for navigation. A cultural framing and understanding of corruption will aid development agencies in operating within the parameters of local culture effectively.

Organizations supporting international agricultural development initiatives should consider the following critical questions when designing and evaluating program content and structure:

Critical Questions for The Ethic of Culture:

1. Do all stakeholders comprehend the relevant information?
2. Is the communication process culturally-minded?
3. Are appropriate language and behavior choices used?
4. Are the proposed outcomes a "fit" with existing cultural norms?
5. What are local value structures for innovation and technology?
6. Can the program be implemented within the existing cultural structures?
7. Are evaluation mechanisms designed with cultural contexts and values in mind?

8. Is the proposed time frame harmonious with local values and practices?

Appropriate emphasis on the ethic of culture promotes harmony between development organizations and local populations. By critically considering the role of cultural values when designing development initiatives, the likelihood of long-term sustainability and program success increases.

***The ethic of community***

The ethic of community accounts for a number of parameters to define its boundaries, and is based in concepts from anthropology and sociology. Community incorporates individuals that are formally and informally bound by what they do (Wenger, 1998) and where they are located. Community is the discursive social space in which a population resides, as well as its infrastructure. Agrawal (2005) explained,

As community becomes the referential locus of environmental actions, it also comes to be the arena in which intimate government unfolds.

Intimate government shapes practice and helps to knit together individuals in villages, their leaders, state officials stationed in rural administrative centers, and politicians interested in classifying existing ecological practices. (p. 19)

Programs that balance local knowledge with innovation strengthen community networks with sustained relationships and associated trust (Carolan, 2006). Studying a community for its attitudes, behavior dynamics, and interconnections lends insight to determining local values and structures (Arensberg, 1954). Community leaders should be involved in

the design and implementation of international development programs in order to keep the local/organization priorities and laws and infrastructure at the forefront of planning.

Creating an organization based in the community offers participants new resources and exposes them “to revised ‘rules,’ which encourage or enable sustainable practices, which the participants can then perform” (Middlemiss, 2011, p. 1160).

Working within community discourse, practices and habits entails shifting behaviors of community members while building capacity and maintaining or improving existing relationships. The goal of emphasizing community is not to replace local organizations with external ones. As Hoggett, Mayo, and Miller (2009) stated, “community development is committed to supporting indigenous collective action by building or strengthening autonomous community organizations and working to agendas determined by the members of the community” (2009, p. 46). By developing the community’s decision making capabilities and level of citizen involvement, the community becomes more stable and able to make sustainable decisions for the long-term; more importantly, the decision-making process itself becomes sustainable (Bunch, 2000).

Hoggett et al. (2009) explained three dimensions of structural/institutional factors that place the development organizations and workers in challenging scenarios: state and civil society, in regards to the conflicting demands of multiple audiences; contested communities, which describes the diversity of viewpoints and experience found in a physical community; and, inconsistent policies, which are neither transparent nor readily contestable (p. 61). “The nature of the relationship between a community and the external intervening agent, and specifically the practitioners it employs, is critical to the

success of any strategy and is one that is often tense and difficult” (p. 45). Hoggett et al. (2009) recognized the motivation to improve the skill set of development agencies and agents when it comes to creating a community ethos.

When possible, a new community of development workers and community members can form for the duration of the project.

Critical Questions for The Ethic of Community:

1. Is the local community engaged?
2. Are local leaders identified?
3. What community structures aid in supporting the project?
4. Do members of all relevant communities both reflect and contribute to social relationships through program interactions?
5. Is the program evaluated in regard to larger community issues?

These ethical considerations help construct a foundation that aligns with concepts of fair exchange, joint enterprises between individuals and organizations, and member investment in community welfare (Wenger, 1998). Ultimately this engagement creates communities that develop relationships and practices that strengthen communities long-term.

***The ethic of conservation***

Conceptualizing natural resources such as soil and water as limited entities that require thoughtful planning is the core of the ethic of conservation. Conservation is the policy and practices addressing natural resources as a common good that all community members should actively work to preserve, maintain, and renew (Cox, 2007; Welsh &

Rivers, 2011). In agricultural development projects, technology-based innovations could have negative effects on environmental conditions. Water supply is one resource that has limitations in access and cleanliness. For example, in Mexico's Tehuacan Valley, industrial agriculture's water demands leave little for local farmers, creating conflict in the community over water rights (Fitting, 2011). The increased water demand strains community water sources and demonstrates how community conservation values were not prioritized in regional development. When considering long-term program planning, conservation can be utilized to prioritize the environmental health and the community's relationship to its environment.

As Hardin (1968) argued, humans use shared space, "the commons," as much as possible, maximizing the output of the location. As Freyfogle (2008) explained, "culture writes its name on land for all to see" (p. 1). Using land is not an isolated activity. Land management and conservation function within spheres of society, economics, and ecology. Historically, natural factors controlled population and weather variables in order to keep the demand on the space low enough to guaranteed continued production. As use of the commons intensifies, the output eventually decreases as natural resources diminish from extended use. The loss of the shared resource threatens social stability and creates what Hardin (1968) deemed, "the tragedy of the commons." Hardin wrote, "A technical solution may be defined as one that requires a change only in the techniques of the natural sciences, demanding little or nothing in the way of change in human values or ideas of morality" (Hardin, 1968, p. 1243). Many contemporary development



initiatives work to address this tragedy seeking solutions to make land use efficient and profitable through scientific advancement.

Geographer Carl Sauer (1889-1975) emphasized the importance of biodiversity as a means for farmers to maintain and defend their historic and traditional use and ownership of land in the age of modernization and ecological destruction. It is valuable to conserve biodiversity as it maintains the local ecosystem. Soil health is a foundation of biodiversity, and an appropriate context for elaborating on conservation. Materials and species found in soil contribute to the overall biodiversity of the region, and should be incorporated into any discussion addressing the economy of the land. Soil “will register the experiences of past and present use as destructive exploitation or sustained yields of more intensive production” (Sauer, 2009c, p. 107). Not only was soil Sauer’s canary in the coalmine, Sauer argued that when considering land issues, soil is equally important to climate conditions.

The role of the human population in systemic ecology is evident when evaluating how humans manipulate physiogeographic processes and features of the earth:

Man [sic] is an important ecological factor, in other words, in modifying profoundly the paleontological record of the future. The adjustment of plant associations is being disturbed by the introduction of new species, by the clearing and cultivation of land, by fire, and other means resulting from the voluntary or involuntary meddling of man [sic]. (Sauer, 2009b, p. 104)

This interference is as natural as the natural world, yet begs the consideration of conservation discourse, efforts, and methods in order to insure the relationship between humans and nature can endure long term.

The wastage of soil by man [sic] has won attention tardily though it is perhaps to date the most destructive form of exploitation of which man [sic] is guilty.... Neither agriculture nor grazing per se leads to soil erosion. It is principally where men [sic] have considered land in terms of quick and large monetary returns that this ill has arisen. Land as a speculation and soil erosion are closely related.... Soil erosion cannot be studied alone as a physical condition—though the physical conditions thereof must be studied—but that it must be regarded as an economic maladjustment. Good farming does not lead to soil erosion, bad farming does. (Sauer, *Soil Conservation*, 2009, pp. 242-243)

Beginning with the soil, conservation efforts in international agricultural development must give rise to opportunities to collect what Sauer called “the remembered experiences of the people” (Sauer, 2009a, p. 250). Collecting an erosion history as part of conservation efforts has the potential to answer questions using natural and human resources. As a collaborative community activity, an erosion history creates opportunity for knowledge exchange between development practitioners and community members. Questions for the effort could include determining when erosion was first noticeable, how rapid the erosion develops, inquiring about methods that have been used to curb erosion, and how crop yields and weed growth have changed with the soil. Just as tree

rings can offer a history of a forest, the same can be said for careful attention to soil health, and the way communities talk about it.

As soil is the foundation of agricultural production, figuring out how best to conserve soil is also an appropriate foundation for creating a larger conservation schema from the ground up. A feeling of urgency also accompanies conservation, as time is a factor in protecting and sustaining resources in order to prevent large-scale loss. Climate change is happening globally, but local systems absorb and experience the changes differently. Without appropriate conservation values and practices, farming and ecosystems experience increased vulnerability to climate variability. Soil erosion is a physical effect caused by human factors. Environmental vulnerability, too, is related to complex economic, institutional, and social factors that determine how well communities adapt to changes (Bellon, Hodson, & Hellin, 2011). Farmers' responses to climate change may include a number of different strategies including: pursuing a different livelihood, intensifying agricultural production, diversifying crop choices and land use, or ceasing farming altogether (Bellon et al., 2011). Losing farmers is not an obvious reason for conservation practices, but once the connections are revealed the harms of ignoring conservation become evident.

#### Critical Questions for The Ethic of Conservation:

1. What conservation practices are utilized on the community level currently?
2. Are the environmental impacts of the development considered on the local and regional levels?

3. What level of future forecasting is employed to predict ecosystem benefits?
4. Are the appropriate technologies evaluated for their environmental costs and benefits?
5. What role does soil health play in community discourse surrounding conservation

Agriculture posed a particular threat to conservation in Sauer's time, but his claims still speak volumes today. Sauer, in his 1936 essay on soil conservation, warned against prioritizing science in the study of soil erosion. Even though the condition and effects may reside in nature, he argued, the cause of erosion was, and still is, humans operating "unnaturally, and in the long run unsocially and economically" (Sauer, 2009d, p. 243). As a foundation, the ethic of conservation aids in formulating a concept of nature as a finite resource that needs human initiative to be sustained.

### ***The ethic of capacity***

The ethic of capacity accounts for the ability of the community and development workers to function in a given situation. Capacity refers to what a community is capable of accomplishing based on motivation, resource availability, and time. Providing farmers with technological innovations to improve yields is only feasible if the farmers have the capacity to properly utilize technology. Bunch (2000) encouraged the development of small programs in order to "stimulate the enthusiasm, credibility, local participation, and increased sophistication that any larger program will need" (p. 80). Long-term program

success, in his opinion, relies on a core of leadership that allows program growth by increasing the capacity of the community.

Capacity is the ability of collaborators in the development initiative to carry out the work on systemic and social levels. As anthropologist Dr. Louis Herns Marcelin explained in an interview with DiAquoi (2011),

When a system relies mainly on NGOs, or mainly on initiatives that are not sustainable, you will have initiative that can last maybe five to ten years, and then they will collapse. And then, of course, it will continue to perpetuate a crisis. (p. 273)

Organizations working in agricultural development work to generate local policies and practices for community members. These endeavors should begin with the question, “what kind of behaviors do we want to emerge after this collaboration?” The ethic of capacity guides the program to teach a community how to keep projects moving forward to the best of their available resources.

Hoggett et al. (2009) used the concept of capacity to draw “attention to what is potentially realizable rather than towards fixed human attributes” (p. 22). For them, a good society harmonizes its emotional, ethical, and technological capacities while allowing social relationships to flourish. Honoring capacity entails working against the ambivalence that Hoggett et al. (2009) asserted is a mark of relationships between citizens and governments. “The fears that citizens may have about madness, violence, their own frailties and vulnerabilities and so on may be easily denied so that the government is blamed for not doing enough about these things” (p. 23). The resulting

anti-social outcomes on citizen participation reduce the capacity of communities to realize opportunities. Acknowledging this facet of human interaction exposes limitations yet creates opportunity to confront community ambivalence with appropriately designed programs. Similarly, in this undertaking, capacity creates a foundation of scalability in development programming and discourse.

Scalability means that programs implemented are scaled to fit the community's situation. One example would be designing programs which take into account the existing communication behaviors among farmers. Existing technological capabilities and training are another consideration when considering the capacity of the program (Bunch, 2000). Development organizations should always look to existing community behaviors in regard to time, availability, and practice. If the local capacity is ignored, the initiative can be too ambitious to be effectively implemented, or too inconsequential to make a difference in the community.

Agricultural development programs can address capacity building as part of their protocol by: partnering agronomists with farmers and students in university programs with community leaders; improving access to agricultural education and technology; establishing mentoring programs; and managing environmental information. Leadership training is also necessary. Leaders within the project must also train and enable community members to strengthen organizational and program development (Bunch, 2000; Kitinoja, Saran, Roy, & Kader, 2011). Leaders must find ways to respond to these issues pertaining to risk, perception of science, and time constraints that create urgency for the community. Time is always a factor when considering seasonal and perishable

food resources in the short term, and environmental aspects of production in the long-term. Development initiatives that promote increased detrimental inputs into agricultural systems have not offered much in the way of long-term sustainability, as repeated use of detrimental inputs decrease soil biodiversity and capacity over time (Cerdeira & Duke, 2006; Kremer, 2009; LaSalle, 2009; Webster & Sosnoskie, 2010; Zilverberg, Kreuter, & Conner, 2010).

The concept of capacity is also the ability to improve the community's status quo. The development initiative must create practices that overcome existing barriers to understanding and develop leadership among collaborators. This "adaptive capacity" of the community determines its ability to endure and adapt to external stress in situations (Olowa & Olowa, 2011). Human communities and economic systems factor into a community's adaptive capacity. Other characteristics contributing to the adaptive capacity of a population include: available technology, availability and distribution of resources, institutional structures, decision-making procedures, human capital, social capital, understanding of risk, information management, credibility of decision makers, and public perception of the innovation (Olowa & Olowa, 2011). Environmentally focused programs that aim to undo physical damage in agricultural systems also must consider their mitigative capacity, which is human-centered, but connected to nature and its systems (p. 3638). These capacities are part of the local decision making schema and influence the perception of what is possible as well as what can be considered. Generating local leadership from collaborations depends on institutional legitimacy, organizational capacity, and political capital (Nowell & Harrison, 2010). Motivations to

carry programs through as well as perceived abilities to lead and sustain programs contribute to the capacity of local communities.

Cultivation of local capacity is aided by joining resources from the community with outside partners working in international agricultural development initiatives. Kitinoja et al. (2011) explained the need for advocacy as part of a more holistic approach to the entire system of agriculture. Strengthening local capacity includes: supporting microcredit programs, farming associations and cooperatives, extension programs, training for women, and increasing access to market training. Working with and within existing agricultural networks to reinforce local leadership prevents development initiatives from reinventing processes that are already in place. Strategies may include technical education and training, access to communication and educational resources, needs assessment protocol, and farmer-to-farmer mentoring. Plus, as farmers' capabilities increase, the local capacity for managing innovation increases, and the adaptive capacity of the community improves.

Critical Questions for The Ethic of Capacity:

1. Are the recommendations suited to local cultural, economic, and natural resources?
2. What resources are affected by the development?
3. Are sufficient methods employed to insure smooth transfer of control to local communities?
4. Is the technology recommended sustainable within local economic, social, and environmental contexts?



5. Are future projections guided by evidence rather than by speculation?
6. What competing time demands exist?

Capacity-building and capacity-honoring efforts should be comprehensive. From a perspective of scale, agricultural development projects need to coordinate with the relative ability of the community to enact and coordinate change. Existing indigenous infrastructure should be considered. The program should be designed to endure after external support has been removed from the community and the community should be able to innovate and adapt program and innovation approaches to suit needs over time

### ***The ethic of care***

The ethic of care is grounded in the concept of thoughtfulness and solidarity, and emphasizes the relationships between development workers and village participants (Freire, 2008; Hoggett et al., 2009). This emphasis enables the recognition of the networks and webs, and more importantly, the people involved in decision making and supporting social structures. Villagers in developing countries often exhibit characteristics of demoralization after years of disservice by their governments and outside agencies. Corruption of local systems plagues efficacy of service delivery and operation. “Complacency, apathy, and disbelief in future improvements are to be expected. And when no one believes that the future will be any better, no one puts much effort into trying to make it better” (Bunch, 2000, p. 77).

While development practitioners are not the contemporary cause of community complacency, program development happens within the context of those apathetic feelings. Care is an ethical foundation specifically because it has been missing from

decades, possibly centuries, of colonial and hegemonic attempts at development. Additionally, care embraces the notion of justice and fairness in relationships, which aids in renegotiating the discourse on economic incentives of innovations and helps create discursive responses to corruption. Consideration of the necessary capital and labor inputs as well as the cultural aspects of development choices all create the context in which development occurs (Bunch, 2000). Relationships are complex and require maintenance that the concept of care addresses. Hoggett et al. (2009) suggested that the “affective aspect of the commitment to care and social justice corresponds to an enduring moral sentiment” (p.81).

Care also addresses aspects of risk associated with development, which is also a common theme in environmental communication literature that connects care to conservation. Many development programs that have corporate partnerships ask community members to assume a great deal of risk, which can work to the detriment of the villages. Bunch explained, “When a poor farmer’s crops fail, he [sic] may go hungry. Poor people simply cannot afford to take the same risks that more prosperous farmers do” (Bunch, 2000, p. 105).

The element of care in international agricultural development initiatives pertains to the distinctly intrinsic and human elements that emerge from the undertaking and the building of trust. Issues of respect, appropriate governance and communication create an environment where care for other humans is a foundation. For our purposes, it is helpful to conceptualize trust as “a locally meaningful performative act, premised upon the encapsulation of interests” (Carolan, 2006, p. 328). Development initiatives begin with

the intention to improve the way of or quality of life for a particular population. Care is the generation of possibility and hope for the future while acknowledging the shared experiences and connections of all involved. If this does not happen, Bontenbal and van Lindert (2011) warned against the marginalization of local priorities over external goals. Bontenbal and van Lindert (2011) emphasized the values of equality and mutuality to create cooperative foundations with local partners. Prioritizing these principles in the interpersonal exchanges can create the positive environment necessary for program success.

Feedback is an important element of care, as it helps to design the program as it goes along. Feedback also contributes to cyclical communication that aids in distributing the power between all involved parties. Community members will rely on accountability and evaluation structures after change agents leave, and there is a need for development programs to demonstrate care in order for the community to maintain changes. Agrawal (2005) explained,

It is reasonable to conclude that when villagers participate in monitoring and enforcement they come to realize at a personal level the social costs generated by those who do not adhere to the practices and expectations that have been collectively established. (p. 17)

It is negligent to introduce innovations to a community that cannot support them after the support agency leaves the region, or to introduce practices that honor foreign values and priorities over those of the community (Bunch, 2000).

Agrawal (2005) argued for the development of “intimate government,” or government with less physical and social distance. In this context, the community is at the forefront of designing new regulatory strategies. Additionally, community members take on a participatory role in determining their own conduct in regards to environmental policy and values, engaging in self-governance. He states,

The process of subject formation, implicit in most studies of environmental government, is crucially connected to participation and to practice. The practices of enforcement and regulation in which villagers have come to participate have to do with more careful government of environment and of their own actions and selves. (Agrawal, 2005, p. 21)

When establishing and evaluating the care present in communication practices and strategies, the following critical questions create a perspective from which to consider the role of care in any development partnership.

Critical Questions for The Ethic of Care:

1. Is feedback utilized throughout the process of development?
2. What is the role of privilege in the process and its outcomes?
3. Is power exercised uniformly?
4. In what ways is the community reliant upon outside organizations and structures for its economic and productive capabilities?
5. Do recommendations address the problem sufficiently?
6. Are implications for humans and the environment considered on the local, regional, and global levels?

Bringing an aspect of care to international agricultural development projects emphasizes the role of human communication in crafting policy and practical responses to existing agricultural issues. The ethic of care is a reminder of the humanitarian aspects of development work and their potential for helping communities grow after years of tumultuous development initiatives (Kothari, 2005).

### ***The ethic of consistency***

The ethic of consistency addresses the need for a set of behaviors when working with local communities that are reliable over time. The element of trust in relationships with local citizenry is prioritized, as is the development agent/agency's ability to follow through on projects and commitment to delivering on promises made to communities and sponsoring agencies. Downward and upward accountability create an environment of consistency that increases trust in relationships with local communities. Organizational integrity, credibility, and dependability are built upon trusting relationships with local communities (Meredith, 2010).

Communities in developing nations have the experience of unfulfilled promises by external development agencies (Thieshusen, 1995). Historically, outsider organizations attempting to provide assistance have treated villagers with indifference and exploited rural communities (Bunch, 2000; Holt-Gimenez, 2006; Kothari, 2005). Bunch (2000) addressed the importance of keeping promises made throughout the development process. He wrote about the habit of development agencies to repeatedly make promises and create expectations that are not met. "Promised supplies arrive too late, extensionists fail to attend meetings, services offered are never provided, and

projected benefits never materialize. A program that fails to keep its promises damages its credibility and kills villager enthusiasm” (Bunch, 2000, p. 76). Participation from villagers can contribute to community transformation, yet too much top-down leadership can be divisive for participants (Hoggett et al., 2009). A program that loses the enthusiasm of village participants risks damaging the leadership credibility and potential of local leaders who support the program, which could have negative long-term effects on the community.

Bunch (2000) recommended promising as little as possible and only making promises that can, with absolute certainty, be fulfilled. Bunch (2000) advised over-preparing in every case: from pre-planning funding expenditures to pre-ordering supplies that need to be on shelves in storage and in stores. Anyone working in international development knows how frustrating attempts at service delivery can be. It is tempting while in the field to make promises or speak to services that might be possible, in order to gain trust and build rapport with villagers. It is vital to plan around the idea that participants should be motivated by results, not promises.

A valuable element of any international agricultural development intervention is the ability to gain and maintain trust. As collaborators from external communities, there may be some adjustment time to working in any community. Relationships between outside actors and community members should focus on building trust throughout the process while inviting reciprocity. Expectations and responsibilities for the outside parties should be clear, and established in accordance with local leadership and culture. Outsiders should work to diminish the element of “surprise” as much as possible,

understanding that communities may have varied expectations for outsider-assisted interventions. Working to meet expectations while building trust can be improved through positive relationships with members of the community.

Critical Questions for The Ethic of Consistency:

1. Are standards for fair practices established?
2. Is the communication throughout the process consistent?
3. Are the expectations and goals communicated effectively?
4. Are norms of interaction established and followed?
5. Is program design consistent with stated goals?
6. Are relevant members of the community affected by the program in a mutually-agreeable way?

Every available effort counts in creating program stability that builds long-term trust. Having a reliable relationship with a community leads to more sustainable choices for long-term community development.

**Conclusions and suggestions for implementation**

These seven concepts create a strong framework for a theoretical and practical approach in international agricultural development. This model is particularly relevant for programs introducing and supporting change, while strengthening and building capacity of existing local institutions. Any program emphasizing change must consider the fact that technology develops exponentially faster than human behavior; yet, it is the changes in human behavior that support the infrastructure of innovation and change. While promoting the bounty of the latest scientific endeavor, development programs

may overlook whether or not the innovation and how it is presented to the community are the best choices for the community's context. Time is a significant factor in diffusion-based methods and incorporating innovations into communities that have different epistemological values of time and change is incredibly complex. The seven tenets help development agents in planning communication strategies that work with indigenous communities. Additionally, this approach follows the “strategy of synergy” (Meredith, 2010) that emphasizes serving multiple audiences with the same communications while building long-term trust relationships.

The relationship of the seven constructs to each other is also necessary to consider when thinking about this model. Based in environmental communication, collaboration, conservation, and capacity address how humans work together to make decisions about the use and allocation of resources in time-sensitive contexts. Culture, community, and care extend from indigenous knowledge management to account for issues of community identity, tradition, and sustainability. The seventh construct, consistency, is perhaps the most important. Without consistent attention and emphasis on the other six, the program and partnership could suffer.

While designed with the international agricultural development professional in mind, this framework has applicability for other fields. One extension of this model could be to design public health campaigns that better address audience habits from a deep cultural perspective. Others working with non-agricultural environmental conflicts, policy initiatives, and public participation initiatives could benefit from this holistic approach, while considering audience resource and capacity issues. Communicating with



the public about specialized knowledge, such as science and/or nutrition, requires thoughtful preparation that supercedes marketing a product or idea.

Effective communication that embraces local vocabularies creates a localized discourse of agricultural innovation, community development, and/or scientific advancement. Localized discourse is harmonious with cultural values and practices. Utilizing shared discourse may strengthen capacity of local leadership, enabling long-term program sustainability (Bunch, 2000). When working with development initiatives in the neoliberal era, this theoretical base is relevant as a scalar extension of Bunch's (2000) work; it is not only applicable at the village level, but can be applied in regional, national, and international levels in order to promote local inclusion in higher-level policy.

CHAPTER IV

LITERATURE REVIEW: CONSTRUCTING THE CONTEXT OF  
THE BINATIONAL AGRICULTURE RELIEF INITIATIVE'S  
PROGRAMS IN MEXICO

*It was, and it is, our job, our calling, to tell better stories.*

*To use communication stories to communicate.*

*To use how we communicate to teach people how they may choose to live.*

(Goodall, 2004, p. 188)

The Binational Agriculture Relief Initiative (BARI) works to increase awareness of the realities of farmworker life in Mexico and the United States while inspiring improvement in family life. The BARI promotes and supports: education of farmworker families in the United States and Mexico; projects in Mexico and California that prioritize sustainable nutrition, financial security, and independence for indigenous communities; and federal and state legislation affecting the lives of farmworker families. The term *campesino* is used to describe many of the community members BARI serves. *Campesinos* and *campesinas* are men and women whose “whole livelihoods are based on small-scale agriculture, who generally engage in small commodity production, and who rely primarily on family labor” (Holt-Gimenez, 2006, p. 199). I use the term interchangeably to mean peasant, indigenous, and smallholder farmers. Montejo (1997) stated, “The *campesino* feels he is a part of nature. He spends all his life bound to it like a bur or an unseverable and timeless offshoot” (p. 57). This systemic link from land to

food to farmer establishes the importance of the food-producing environment to the culture, as most families produce their own food.

The BARI designs programs that improve living conditions of *campesinos* and farmworkers. Specific projects serving *campesino* communities in Mexico include: distributing donated clothes, shoes and toys through piñata parties; funding educational opportunities for *campesino* children; developing an ecotourism and environmental center in Cuquio, Jalisco; working to increase organic agriculture production; and partnering with an agricultural cooperative in Guadalajara. The circumstances navigated by the BARI in the United States and Mexico include: discourse surrounding migrant populations, issues addressing citizenship, economic opportunities or lack thereof, access to education, and nongovernmental organizations (NGOs) and government programs in both countries.

### **Nongovernmental organizations working in Mexico**

#### ***Mexico: A country in conflict***

Work by NGOs addressing agriculture in Mexico responds to the effects of NAFTA and the drug war. As Mintz (1996) stated, “War is probably the single most powerful instrument of dietary change in human experience” (p. 25). The realities of life in Mexico mirror post-war conditions: infrastructure damage, internal migration, emigration, loss of family structure, lack of economic opportunities, personal security issues, environmental effects, and lack of effective and consistent local and national governance (Englebert & Tull, 2008; Erskine & Nesbitt, 2009). Development programs

operating in these contexts work on a variety of levels to re-establish and reshape the discursive and physical spaces in which decisions are made.

NGOs working in Mexico navigate a number of circumstances, but perhaps the most imminent is Mexico's ongoing internal conflicts. In a traditional sense, Mexico is not a country at war. There is no official declaration of foreign "other" and no international deployment. Mexico's war-like circumstances are the result of drug cartels, organizations that distribute narcotics, battling for international trafficking routes and domestic distribution territory. The goal of the cartel violence, also called narcoviolence, is to undermine state authority while "permanently consolidating spheres of control" (Pacheco, 2009, p. 1022). Narcoviolence is accomplished via threats or violence, profit-driven, without ideological objectives, and not interested in obtaining control of public offices (Pacheco, 2009).

### ***Drug cartels and violence in Mexico***

Mexico has a storied history of providing illegal substances to consumers in the United States (Paternostro, 1995). A hundred years ago, the primary goods were heroin and marijuana. During the Prohibition-era, alcohol was added to the list. Mexico's drug trafficking systems originated with poppy crops to support medical and recreational opiate production for the United States in the 1940s. As the only opium-producing country in Latin America, Mexico worked to meet the pharmaceutical needs of the United States medical industry in the context of World War II (Pacheco, 2009). When mining in northern Mexico's states of Sinaloa, Chihuahua, and Sonora lost profitability, marijuana was cultivated in addition to poppies (Pacheco, 2009).

In the 1970s, drug activity was focused in the states of Durango, Sonora, Chihuahua, and Sinaloa (Pacheco, 2009). When the United States Drug Enforcement Agency shutdown drug trafficking over water routes, there was an increase in the amount of narcotics coming over land through Mexico (Longmire & Longmire, 2008; O'Neil, 2009; Pacheco, 2009). Mexican cartels arranged deals with Colombian drug lords to move narcotics over land routes in Central America and Mexico, dramatically increasing the income of cartels (Pacheco, 2009). The increase in profits corresponded with an increase in the scope of cartel dealings, having associations with human trafficking of laborers, firearms dealing, cocaine trade in Europe, and methamphetamine supply in the United States (O'Neil, 2009; Pacheco, 2009).

The growth of the volume of products also led to an increase in violence, as the cartels experienced a period of rapid expansion in a grab for territory (Pacheco, 2009). In the 1990s the Gulf cartel hired Mexican military Special Forces soldiers to serve as the security and enforcement arm of their cartel. After a few years, the security detail became the Los Zetas cartel, arguably the most violent and technologically advanced in the country (Longmire & Longmire, 2008). The drug trafficking business between South America, Mexico and the United States is worth an estimated 13 billion USD per year ("Q&A: Mexico's drug-related violence," 2012). The primary cartels (with varying degrees of strength) are: The Sinaloa Federation, Los Zetas, The Gulf Cartel, La Familia Michoacana, The Knights Templar, Independent Cartel of Acapulco, Cartel de Jalisco Nueva Generacion, Juarez Cartel, Cartel Pacifico Sur, and the Tijuana Cartel/Arellano Felix Organization (Stratfor, 2012).

The two most active and strong cartels are The Sinaloa Federation and Los Zetas. Mexico's Attorney General's Office lists the following seven cartels as the primary traffickers: the Tijuana Cartel, the Juarez Cartel, the Gulf Cartel, the Sinaloa Cartel, the Colima Cartel, the Oaxaca Cartel, the Milenio Cartel (Pacheco, 2009). Pacheco (2009) identified the Tijuana, Juarez, Gulf, and Sinaloa cartels as the most violent, due to their control of United States distribution. The majority of violence is concentrated in areas along the United States-Mexico border, but in recent years has spread throughout the country (Longmire & Longmire, 2008). Initially, cartels maintained control over the regions many were named after, but as power shifted, the geographic locus of cartels shifted.

In December 2006, President Felipe Calderón began his crackdown on cartels. Since then, 47,515 deaths have been blamed on the drug war ("Q&A: Mexico's drug-related violence," 2012). Cartels are not only in the business of moving drugs, guns, humans, and money between the United States and other countries; they also work diligently to protect the routes used to move their commodities. This need for protection resulted in cartel members engaging in guerilla-style strategies to attack police squads with military-grade munitions (O'Neil, 2009). Over time, the cartels have ratcheted up their intimidation tactics to keep citizens living in fear. Assassinations, executions, kidnappings, and use of advanced weaponry have increased throughout the country (Longmire & Longmire, 2008). Videos of cartel members beheading victims can be found on the World Wide Web. In the cities of Cuernavaca and Guadalajara bodies have been hung from local bridges as a public display of cartel intimidation. The majority of

violence takes place in Mexican states that border the United States, but in recent years violence has increased in almost every part of the country (Longmire & Longmire, 2008).

In 2008 the United States Joint Forces Command's Joint Operating Environment report equated Mexico to Pakistan as a possible "worst-case scenario," citing its vulnerability to sudden and rapid collapse in part due to the volatility of cartel behavior (United States Joint Forces Command, 2008). The influence of the cartels corrupts, damages, and distorts governmental function on all levels. O'Neil (2009) explained that the Mexican state will not fail, but the future of its democracy is fragile. His only solution to confront the threat of cartels is for the United States to support Mexico's democracy, primarily through market structures. *Plan Merida* and other assistance plans the United States offers to Mexico emphasize militarization of the response to the war on drugs instead of democracy-building. By focusing on military solutions, citizen participation may diminish in market structures, preventing economic opportunities that facilitate growth and development. A democratic nation-state's stable autonomy creates a context where it is more difficult for the cartels to flourish. If there is enough incentive to dissuade citizens from supporting the cartels, their power could fade.

#### *Cartel members in Mexican society*

Members involved in cartel activities are folk-heroes to both rural and urban dwellers in Mexico (Pacheco, 2009). Cartel members fit within Hobsbawm's (1981) definition of social bandits, specifically that of the noble robber—beginning as a victim of injustice, fighting to right wrongs, killing in the name of justice and self-defense,

supported by the local population, the enemy of oppression, and taking from the rich to give to the poor. This form of banditry is often a symbol or forerunner for major social revolutions like peasant uprising and emphasizes the important relationship between peasant society and “outlaws.”

As individuals, [bandits] are not so much political or social rebels, let alone revolutionaries, as peasants who refuse to submit, and in doing so stand out from their fellows, or even more simply, men [sic] who find themselves excluded from the usual career of their kind, and therefore forced into outlawry and “crime.” *En masse* they are little more than symptoms of crisis and tension in their society – of famine, pestilence, war or anything else that disrupts it. Banditry itself is therefore not a programme [sic] for peasant society but a form of self-help to escape it in particular circumstances. (Hobsbawm, 1981, p. 24, emphasis in original)

The popularity of the *narcocorrido*, a ballad about the life of drug traffickers, has helped elevate the status and social cache of cartel membership. Pacheco (2009) explained, “the law enforcement and social justice void left by the states is vividly patent in *failed communities* and translates into a feeling of detachment from any national or regional project with which the affected citizenry may identify” (p. 1035, emphasis in original).

Cartel members are not so much political or social rebels, but they are individuals pursuing economic gains outside the mainstream structure. As a whole, cartels are symptoms of crisis and disruption in society. For populations glorifying the cartel lifestyle, the celebration is a means to mentally escape negative circumstances of



poverty and migration (Hobsbawm, 1981). With a lack of faith in the government's ability to provide for their best interests, citizens become disenfranchised from the political system and develop unstable political opinions (J. A. McCann & Lawson, 2003). Fundamentally, citizens feel they independently lack the opportunity for regular employment and economic mobility that cartel participation offers. In some towns, powerful cartel members pay for food, school improvements, and medical care in exchange for complicity (Lopez, 2007). Aiding cartels is often a means for teenagers to migrate from their home communities and is one of few options for generating income.

*Challenges specific to NGOs working in conflict and post-conflict regions*

Mexico's internal conflicts require special consideration for nonprofit organizations working within her borders. Contemporary conflicts have evolved from international battles to internal conflicts of antagonistic groups opposing government structures (Erskine & Nesbitt, 2009). deSoysa, Gleditsch, Gibson, and Sollenberg (1999) described these internal conflicts as "apolitical brutality" (p.16), with economic purposes as the foundation instead of tribalism and ethnicity. NGOs working in-country engage in post-conflict peace building as they foster economic and social development and rebuild communities damaged by the political, social and economic effects of the cartels' drug war and the fallout of the North American Free Trade Agreement (NAFTA). Some communities exist in conditions that mirror post-conflict nations around the world (Erskine & Nesbitt, 2009; Krause & Jutersonke, 2005; McAllister, 2009). The challenge inherent in working in post-conflict scenarios is creating initiatives that can be incorporated into existing weak government structures while promoting community

ownership of the program in order to ensure long-term success (Erskine & Nesbitt, 2009). Transnational economic treaties with neoliberal goals, such as NAFTA, foster political environments that privilege economic power structures as the nation-state declines (Pezzullo, 2007), often diminishing the capacity of local governments to effectively serve citizens.

NGOs working in Mexico must be aware of and sensitive to the issues and relationships at play in the context of the drug war. Building democracy through programs that increase public participation helps citizens experience personal agency. Because many communities have favorable relationships with existing cartel members, there is some delicacy and finesse required to untangle those connections. Pacheco (2009) argued that for any effort to be successful in confronting the scope of the cartels' behaviors, it must engage society on a number of levels to develop opportunities that counteract cartel appeal.

Krause and Jutersonke (2005) addressed the unsystematic and ad hoc manner in which post-conflict development programs are designed and implemented without considering underlying assumptions and biases. Their study examined how development interventions occurring during times of conflict often aim to protect those already in power. While the inevitable involvement of humans seemingly corrupts all systems, Krause and Jutersonke (2005) stressed the importance of repeated and cumulative efforts to reach a tipping point in "breaking the vicious cycle of endemic conflicts, and in setting states on the path of sustainable security, development and state-building" (p. 449). The existing contexts of development initiatives are challenging, but not

impossible. Patience and consistent commitments to program opportunities help to enable long-term sustainability and success.

Complicating matters are myriad development approaches that are not panaceas, but are used as such throughout the world to address common problems in unique environmental and social contexts. McAllister (2009) critiqued the World Bank's focus on using agriculture for development in countries with histories of conflict over land tenure, land use, and rural poverty (p.650). To address poverty and inequality, organizations must deeply understand the daily processes and values of communities. Erskine and Nesbitt (2009) addressed the need to work with communities for "substantial humanitarian, rehabilitation and reconstruction assistance over a long period to regain their food security and reduce poverty" (p. 313). They also discussed the widespread use of seed aid, which has short-term success, despite the fact that in a post-conflict situation both the private and public sector struggle to meet the needs of small-scale farmers (p.317).

#### *Development responses to post-conflict scenarios*

In post-conflict contexts, understanding how people achieve security on the individual, family, and community levels is crucial; without security, survivors may not recover. Communities affected by migration and violence need programs that work to keep people in one location. Citizens must trust that the program is not corrupted by context and that it will provide relief from the persistent threat of ongoing conflict. Greater reliance upon efforts directed at indigenous populations help to create a power balance for the region/state's reconstruction on the social and economic levels

(Englebert & Tull, 2008). The agricultural sector in Mexico is the country's largest employer and revitalizing the agricultural economy is crucial for generating long-term sustainability. One approach is to build the sector's capacity. Capacity building, the development of human behavior, addresses a system through training. Building government capacity to support development and community capacity to engage development are vital (Erskine & Nesbitt, 2009).

### ***Women in Mexican development***

Increasing services and opportunities for women in non-traditional agricultural roles is an effective way to support economic growth and agricultural development. The role of women in Mexico's development future has gained prominence in the years following NAFTA's passage (McCarty & Altemose, 2010; Rothstein, 1999). As many of the men in rural communities have migrated north or become part of the *narco* (drug) network for financial reasons, empowering women through development programs is an appropriate response in post-conflict planning. Specifically in agriculture, production is increasingly feminized as more women assume previously "male" duties (Lopez, 2007; McCarty & Altemose, 2010; Rothstein, 1999). This transition is accelerated by conflict, yet most post-conflict development programs incorrectly presume farmers are men (Zuckerman & Greenberg, 2004). To address gender dimensions in post-conflict development, Zuckerman and Greenberg (2004) suggested the use of female-focused activities, which recognize the gender-related impediments endemic in the status quo, and promote gender-oriented activities that prioritize respect and equality. Government policy regarding land ownership is one development priority that can benefit women, if

laws and programs support women shifting from roles within the home to becoming farmers and landowners.

### **Evolution of Mexican land tenure and agricultural policy**

Agriculture in Mexico ranges from large industrial farms to smallholder and/or subsistence farmers. The policies and programs governing and serving agriculture changed over the years as political mores of the country shifted. To consider contextual factors affecting agriculture in Mexico, an historical understanding of national-level policy and programs is necessary. Without appropriate policy, opportunities for farms and domestic-oriented agriculture are diminished. Throughout Mexico's history, shifts in land tenure and agricultural support mechanisms have both strengthened and undermined farmer access and ownership of land.

Aztec society had a communal form of land ownership that diminished as warfare increased, and the role of peasants became more labor-oriented (Assies, 2008). In 1856, the Lerdo Law increased the availability of traditional communal lands for private ownership. The intention of the law was to create a sector of landholding farmers. After the law's enactment was the consolidation of large land holdings, called *latifundios*. It is estimated that in the 54 years since the Lerdo Law's passage, approximately 85 percent of existing communal lands were purchased by entrepreneurs (Almazan, 1997).

During the presidency of Porfirio Diaz (1876-1910) land seizure was a common practice. Farm land was taken without due process from indigenous communities. Land was sold or given to those affiliated with President Diaz. The unequal land distribution

led to the prominent role of Emiliano Zapata and agrarianism in the 1910 Mexican Revolution. During the revolution, armed indigenous *campesinos* formed resistant armies that regained unofficial control over lands. Mares (1985) explained that the Mexican Revolution “embodied a xenophobic reaction to... domination and installed the search for national self-determination as an integral part of the national psyche” (p. 675). In 1915, President Venustiano Carranza ordered all communal lands which had been sold since 1856 to be returned to indigenous owners (Almazan, 1997).

### ***Article 27 and the ejido system***

In 1917, Article 27 of the Mexican Constitution established a legal framework for agrarian policy reform. One emergent structure was the *ejido* system, where all farmland belonged to the state, but was available to farmers through a communal setup, preventing the establishment of large private rural landholdings. The foundation of Article 27 was that land rights should belong to the person/s using the land. To regain land rights, farmers leasing land could petition the government to approve a local *ejido*. Farmers working the *ejido* lands, or *ejidatarios*, were permitted to farm the land for food and for profit, and the land’s inheritance was guaranteed for one son. Farmers were not permitted to rent, sell, or use the land for credit (Schmidt & Gruben, 1992). Although designed to evenly distribute land resources for farmers, the system did not work as intended. Families often had more than one son, leaving many prospective farmers without land, and with each passing generation the strain on the land increased.

The Cárdenas government (1934-1940) engaged in large-scale land redistribution prompted by a decrease in agricultural exports after the 1929 Wall Street crash. As a

nationalist response, Cárdenas promoted the *ejido* as the uniquely Mexican backbone of agriculture, strengthening the role of rural populations (Almazan, 1997; Mares, 1985). Other efforts to improve conditions of rural populations included credit availability, investment in infrastructure, improved education and health policies, and pro-indigenous policies, strengthening the institutional role of the *ejido* (Assies, 2008). During the years leading up to and including the Green Revolution, Mexico's land tenure shifted back and forth between pro-indigenous and pro-industrial perspectives.

*Ejidors* could be as large as plantation-era *haciendas*, yet the production was managed by each family controlling its parcel. Land in the *ejido* system was commonly owned. Commercial crops produced on *ejidos* included: coffee, cotton, henequen, rice, and sugar (Assies, 2008). As a form of geographic and social organization, the *ejido* system was supported by the national government providing: technical assistance, credit opportunities, seed supplies, rural education improvements, medical care, roads and other resources (Assies, 2008). The endurance of the *ejidos* during the Cardenas era “resulted in the emergence of a bi-modal agrarian system in which an increasingly impoverishing reform sector exists alongside a relatively small number of powerful and well-capitalized commercial agriculturists” (Assies, 2008, p. 44).

### ***The Mexican miracle and the fading relevance of ejidos***

From the 1940s to the 1970s, during the terms of presidents Avila Camacho (1940-46), Miguel Alemán Valdés (1946-52), Adolfo Ruiz Cortinez (1952-58), Adolfo López Mateos (1958-64), Gustavo Díaz Ordaz (1964-70), policies focused more on stabilizing development which favored industrial production. Other characteristics of

stabilizing development included: “wage restraint, increased transfers from the agricultural to the industrial sector, and a close watch over state expenditures” (Mares, 1985, p. 677). The *ejido* system and smallholder farmers were a pool of consistent labor for commercial agriculture throughout the 20<sup>th</sup> century, during these years in particular (Assies, 2008). With the effects of the Green Revolution’s increased yields, productivity in this era increased. This period is referred to as “The Mexican Miracle” (Assies, 2008) due to its sustained economic growth over three decades. By the mid-1960s, economic growth was slowing as Mexico experienced agricultural crisis after a population increase (Almazan, 1997; Assies, 2008).

Presidents Luis Echevarría (1970-76) and José López Portillo (1976-82) improved Mexican living conditions through state intervention into economic controls that supported increased agricultural and industrial production. Their goals were to use public resources to stimulate demand in the domestic market, diversify exports, increase import substitution of domestic goods, and expand productive capacity (Mares, 1985). Different segments of a national alliance with the president included laborers, the middle class, and peasants. During this period, “peasant” meant any producer who employed labor on fewer than 25 days per year (Assies, 2008).

The peasantry accounted for 86.6 per cent [sic] of total producers and controlled 57 per cent [sic] of arable land. The peasantry could be subdivided into sub-subsistence (56 per cent [sic] of all producers), subsistence, stable, and surplus producing (8 per cent [sic] of all producers, holding 22 per cent [sic] of arable land). (Assies, 2008, p. 47)



Participants in the alliance would receive the benefits of growth, and for peasants this meant “accelerated land reform, increased social welfare, and expanded public investment in rural infrastructure” (Mares, 1985, p. 678). The oil boom of the 1970s shifted Mexico’s economy away from agriculture. Toward the end of the decade, *ejidos* were being criticized as economically unproductive and questionably necessary (Almazan, 1997).

In the 1980s, Mexico’s agricultural policies and practices continued shifting to a more liberalized system to create opportunities for globalization through privatization, trade liberalization, and export-led growth (Almazan, 1997). The goal of systemic liberalization was to modernize and increase the efficiency of Mexican agriculture by decreasing state involvement in food markets while reducing production and consumption subsidies. Farmers producing a food surplus benefitted from this setup as they had increased opportunity to sell products on a market. The economic reforms created a transitional period that would end with the implementation of agricultural trade liberalization under NAFTA in 1994, the first trade agreement signed between a less-developed country and industrialized countries with developed economies (Yúnez-Naude & Serrano, 2010).

The emphasis on petroleum in the Mexican economy became problematic in 1982 after global oil prices decreased (Assies, 2008). Intervention by the International Monetary Fund and the adoption of austerity measures meant dramatic cuts in public spending on agricultural support programs. Public institutions providing services were dismantled, privatized, or scaled down. Without government assistance, farmers had no

financial safety when production costs increased while crop prices remained low. Access to credit, supplies, markets, and insurance diminished during this time, with no substitutes emerging. The lack of income led to large-scale loan defaults from farmers working *ejidos* (Assies, 2008, p. 48), deepening Mexico's financial crisis.

During his presidency, Carlos Salinas de Gortari (1988-1994) altered Article 27 to address contemporary agrarian conditions. At the heart of the reform was the idea that since the era of land redistribution was over, steps should be taken to improve agricultural productivity, which echoed many of the World Bank's suggestions (Almazan, 1997). Eliminating constitutional provisions for the *ejido* system was the primary reform strategy. In exchange, *ejidatarios* were encouraged to make improvements on their lands without fear of reclassification or government sale of landholdings. Further, if the *ejido* collectively agreed to participate in the *Programa de Certificación de Derechos Ejidales y Titulación de Solares* (PROCEDE, Program for the Certification of *Ejido* Land Rights and the Tiling of Urban Housing Plots), individual farmers could receive certificates of land rights, providing legal backing for land ownership (Assies, 2008). Reforms also opened the *ejido* system to domestic and foreign sales and investment. If enough members of an *ejido* voted in favor, the land could be sold. Foreign direct investment was also allowed under the reforms of Article 27, as long as foreign investors owned no more than 49 percent of the *ejido*'s landholdings (Assies, 2008, p. 52).

In 1992, there were 28,000 *ejidos* managed by 2.5 million farmers comprising almost half of Mexico's land mass (Schmidt & Gruben, 1992). One quarter of Mexico's

workers were employed in agriculture. With the *ejido* system's prominence fading as investment in Mexican agriculture increased, the role of the farmworker changed. Standardization and industrial production increased worker efficiency, while changing the geography of demand for workers (Schmidt & Gruben, 1992).

***Government programs serving rural and agricultural populations***

The National Company of Popular Subsistence (Spanish acronym CONASUPO) supported producers of eleven basic crops through subsidies and distribution, effectively regulating control of Mexico's food chain (Schmidt & Gruben, 1992). Producers of crops sell their harvest to CONASUPO for a guaranteed price. Between 1991 and 1999 the price guarantees that provided a living wage to many Mexican farmers were eliminated and CONASUPO was dissolved (Yúnez-Naude & Serrano, 2010). The adoption of policies favoring transnational investors undermined the country's ability to continue its form of state-managed capitalism (Talcott, 2010). Before the reforms, farmers could often get a price higher than the world market average by selling their crops to CONASUPO. Once changes were made, the guaranteed price decreased significantly and more crops were imported into Mexico. The ability of small farmers to compete with large farms around the world diminished as the market opportunities expanded.

In 1991, The Agricultural Ministry in Mexico created a decentralized administrative organization, Support Services for Agricultural Marketing (Spanish name Apoyos y Servicios a la Comercialización Agropecuaria, or ASERCA) to support basic crop farmers during the transition to liberalized agriculture. The program's goals were to

eliminate poverty and hunger through creating domestic and export-market solutions to develop and modernize the countryside ("About ASERCA," 2009). ASERCA aided in negotiating price contracts between farmers and purchasers, provided financial support for the trading of certain crops, and generated and disseminated market information ("About ASERCA," 2009). In 1993 ASERCA implemented the Program for Direct Supports to the Countryside (Spanish acronym PROCAMPO), an income transfer program that benefited around 3 million rural farmers and 14 million hectares (ha) ("About ASERCA," 2009; Yúnez-Naude & Serrano, 2010).

In the early 1990s, there was hope that appropriately tailored policy would accompany the changes. As government subsidies were phased out, farmers hoped to diversify production for sale to increase their appeal in international markets. Although optimistic about innovation, a large migration of *campesinos* was predicted as a result of the policy changes (Schmidt & Gruben, 1992). The conversion of Mexico's available land from grain production to cattle grazing meant fewer farmers would be necessary to work the land, and they could pursue economic opportunities elsewhere (Schmidt & Gruben, 1992).

### **NAFTA and rural Mexico: Implications for agricultural production**

Before NAFTA's passage, Mexico's government supported smallholder and subsistence farmers by guaranteeing purchase of a portion of each farmer's corn harvest at elevated cost through price supports. Originally initiated under president Cardenas, CONASUPO was the largest Mexican welfare agency in the 1970s (Fitting, 2011). The corn the organization purchased supplied a countrywide chain of successful

CONASUPO stores that sold staple foodstuffs below market value to the urban and rural poor. In addition, border tariffs protected Mexico's farmers from the entrance of foreign subsidized corn (Fitting, 2011). Once NAFTA was enacted, the terms of free trade gave United States corn growers access to Mexican markets where they could sell their highly-subsidized corn for prices lower than Mexican corn farmers (Nadal, 2002). Eventually, Mexico's small corn farmers could no longer sell a portion of their corn crop to the government for an economic return sufficient to support their families (Henriques & Patel, 2004).

After NAFTA's activation in 1994, the World Bank granted Mexico a Sectoral Adjustment Loan (SAL) so that Mexico could restructure its economy to facilitate the country's partnership with Canada and the United States in the trade agreement. In coherence with neoliberal economic ideology, a provision of the SAL requires that Mexico diminish its social services to the poor and gradually end corn price supports for small corn farmers. Because of the level of corn consumption in Mexico, as well as its contributions to the Mexican economy, corn tariffs would be gradually phased out in order to give the economy time to adjust (Fitting, 2011). The phase-out period was to take 15 years so that small farmers could adjust production and income generation over time. Corn tariffs ceased within 30 months of NAFTA's enactment (Temple University, 2009).

NAFTA created expanded protections for private investors/outside industry which, in turn, contributed to increased ecological degradation (McCarthy, 2004). Multilateral trade agreements worked to the detriment of environmental quality and

human health, created inequality, and regulated interactions with nature. McCarthy (2004) elucidated how NAFTA expanded property rights through enclosing local lands as international properties, encouraged the commodification of nature, and removed social barriers to the accumulation of nature by private investors. Environmental backlash since NAFTA's passage included many accounts of international businesses having free reign to pollute. In one remarkable case, Mexican law shut down a factory for environmental violations, which was later bought by a United States company, which reopened it and polluted the local waterway (McCarthy, 2004). Components of treaties like NAFTA prioritize economic imperatives to stimulate economic growth in rural areas. In essence, NAFTA "trumps" local and even federal policy aiming to preserve environmental quality and increase conservation (McCarthy, 2004).

After NAFTA's passage, despite attempts to protect the Mexican economy from crop surpluses pouring in from the United States, the price of agricultural products plummeted in Mexico. Reasons for this included structural issues and rates of labor productivity as well as the United States' continued use of agricultural subsidies to support producers' costs. Mexican producers dealt with decreased public spending, cessation of credit opportunities, and increased prices for agricultural inputs (Acosta Reveles, 2010). Wise (2010) found that from 1997-2005, the cost to Mexico of all United States surplus dumping to Mexican farmers was over one billion USD per year, with corn farmers' losses totaling over 700 million USD per annum. Over the same nine-year period, United States corn exports increased 413% (Wise, 2011).

NAFTA's effects are absorbed throughout Mexico, but nowhere are the effects as apparent as they are in the rural Mexican countryside. Klooster (2003) reported, "Once predominantly agricultural, Mexico is now a highly urbanized, upper-middle-income country by World Bank standards. Agriculture comprises 5 percent of Mexico's gross domestic product and employs 20 percent of the workforce" (p.229). Considering that 25 percent of the Mexican population, around 26 million people, resides in rural zones, the agricultural and wildlife sector supports one-third of the rural dwellers (Acosta Reveles, 2010). As is the case with many Latin American countries, most of the agricultural production is based in small-scale family farms and peasant agriculture focused on cultivating corn, beans, sorghum and wheat from the previous year's seeds (Acosta Reveles, 2010). Small-scale Mexican farmers obtain seeds by saving from year-to-year or trading with other farmers. As Bellon et al. (2011) explained, "seed sourcing is embedded in well-structured traditional systems with rules and expectations based on family and local social networks regulated by ideas of fairness and of respect for seed" (p. 13432). Changes in traditional behaviors and resource networks due to agricultural internationalization deter small farmers from grain production that can boost local markets (Klooster, 2003).

### **Corn's role in Mexican culture**

The necessity of bringing discussions about food and its nutritional and symbolic meaning for social movements into global discussions highlights the power dimensions that food studies encapsulate. Caughran (1998) illuminated food behaviors as a means of resistance which help recontextualize oppression and realize personal subjectivity. As

new foods are introduced, populations modify and adapt them to their own needs, creating what Mintz (1996) referred to as “indigenization” (p. 21), or identifying the food with the culture and its people. Reframing food’s meaning can be used as a foundation to recognize and subvert oppressive contexts. An example is how Costa Rican populations reclaimed African foods as part of their native culture (Preston-Werner, 2009). Slaves brought to the Americas adapted food behaviors to create new traditions and dishes from available ingredients, enabling elements of their culture to survive circumstance. “They drew upon their ultimate resources as human beings, and they succeeded by struggle in keeping their humanity intact. They did so, as human beings have always done, by giving meaning to their own achievements” (Mintz, 1996, p. 49).

In its symbolic form, food can represent a national identity, and as food is used by a population, it can represent liberation from social and political forces. Goode (1992) explained that “food is both physically manipulated to feed us and intellectually manipulated to refer metaphorically to important aspects of existence” (p. 233). Specific foods studied by anthropologists highlighted cultural meanings of local and national cuisine (Appadurai, 1988; Rouse & Hoskins, 2004; Sutton, 2001), recorded cultural histories of dietary staples (Andrews, 2000; Preston-Werner, 2009), described classification of food production (Sambatti, Martins, & Ando, 2001) and explored nutritional and celebratory values of food (Goody, 2002). Taube (1989) dissected the tamale and the tortilla’s presence in classic Maya architecture, and emphasizes the iconic role of these foods to culture, which correlates with Eggan and Pijoan (1943), who



asserted that cultural stability over time contributes to the emergence of iconic foods that represent more than nutrition to a culture. As food sources are domesticated, human intervention controls reproduction, as in the case of corn and the ways in which it was incorporated into myriad representations within cultures (Mintz, 1999).

### ***Corn's evolution and Mexican agriculture***

Maize is native to Mexico and was domesticated almost 9,000 years ago from its ancestor, teosinte, a wild grass (Temple University, 2009). Over time, human selection of particular genetic traits led to today's strains of corn. Historically, farmers grew corn sustainably to support the thriving civilizations of Mesoamerica, including the Aztec and Maya. Maize is the most important crop in Mexico. Three million acres are dedicated to the production of corn, the largest cultivar in the country (Bellon et al., 2011).

Traditionally, farmers hand-selected varieties of corn genetically adapted to the microclimate in which they were grown (Fitting, 2011). Over time, specialized genetically and geographically diverse landraces of corn developed with adaptations to a great variety of environmental conditions (Bellon et al., 2011; Fitting, 2011). Mexico became the global center of domestication and diversity of maize. Traditional maize systems supported the livelihoods of farmers while maintaining and evolving traditional Mexican landraces (Bellon et al., 2011). As land use changes with the implementation of neoliberal agricultural policies, the geographically-adapted strains of corn are grown less-frequently (Fitting, 2011; Keleman, 2010; Lopez, 2007).

As small-producer and subsistence farmers lives are altered in the wake of NAFTA's enactment, Mexico's 7,000-year-old traditional farming culture is

disappearing (Lopez, 2007). In every society, farmers serve as custodians of genetic biodiversity. In Mexico, this refers to the production of *maiz criollo*, the genetic ancestor of modern corn that has been grown in Mexico for thousands of years. Farmers' changing relationships with support organizations has implications for the ability of farmers to maintain the biodiversity of maize landraces. In fact, since the adoption of NAFTA, farmer access to support has been constrained (Keleman, 2010).

### **Organic as an option in Mexican agriculture**

One way for farmers to circumvent the surplus-affected market is to produce organic crops. Commercial relations in organic agriculture are traditionally direct agreements between consumer and producer, built on trust. The development of international organic markets shifts the locus of trust from individuals producing the food to certification and regulatory bodies like the National Organic Program and/or Certimex. NAFTA's parameters also permitted changes to the existing land tenure structures. The reality of certified organic agriculture post-NAFTA is not that smallholder farmers are practicing it to make money, but that large-scale conventional producers are using it as an economic diversification strategy (Gomez Tovar, Martin, Gomez Cruz, & Mutersbaugh, 2005).

Mexico has two distinct manners of organic certification: one for large corporate organic farms (primarily located in northern Mexico) and the other for smallholder farms, primarily indigenous, and peasant farmers farming less than 30 ha. The large-scale operations focus on using off-farm inputs to support high-yield production for export to organic distributors in the United States. Small farmers are more often linked

to fair-trade markets and their certification efforts are supported by domestic and foreign NGOs (Gomez Tovar et al., 2005). Mexico has not developed a national strategy to support universal organic certification long-term. The dual certification templates create problems for the larger social scope of organic production in the country. Gomez Tovar et al. (2005) explained “the positive social-environmental reputation of indigenous and smallholder peasant production serves to ‘greenwash’ industrially produced yet certified-organic foods” (p. 466). Not only does this duality obscure possible environmental violations of large-scale organic agriculture, but the geographic division of the country’s production also creates a dual economy that showcases different farming methods, cultivated crops, farm size, relations with foreign markets, and organizational behaviors and structures that highlight the differences between market-oriented and movement-oriented approaches. Gomez Tovar et al. (2005) reported that in the year 2000, the average plot size for smallholders was 2.6 ha, cultivating 84% of organic land, while large producers (cultivating more than thirty ha) had an average plot size of 37 ha, comprising 16% of organic land.

### **The Mexican diaspora**

The term diaspora is used to delineate a population that is “dispersed, has an enduring presence, and has social/economic/cultural interactions with populations abroad and in the country of origin” (Garcia-Acevedo, 2008, pp. 1068-1069). Currently, over 90% of the Mexican population living in the United States descended from Mexicans who crossed the border in the last hundred years (Latapi & Janssen, 2006). Migration can be a means of escape from a state’s “capacity of coercion” (Garcia-

Acevedo, 2008, p.1074) while still making economic contributions (remittances) to home communities in which they do not permanently reside. This ongoing interest and engagement is a uniting factor.

In spite of the size of the Mexican diaspora, it has traditionally played a minor role in Mexican politics and policy-making. This may be due partly to the traditional attitude of the Mexican government and Mexican society towards migrants and partly to the social composition of the flow, which has generally comprised relatively poor and uneducated individuals, who have traditionally been perceived as lesser citizens.

However, the influences of the diaspora has increased remarkably over the recent past, as has the impact of their remittances. (Latapi & Janssen, 2006, pp. 20-21)

Connections are financially maintained through remittances, which Latapi & Janssen (2006) reported to total over 16 billion USD in 2004. Garcia-Acevedo (2008) explained how the Mexican government's discourse surrounding the diaspora regards the population as an "economic asset" that would aid the country in supporting neoliberal policies as responses to globalization. Transnational flows of immigration, information, ideas, and money increase Mexico's presence in a globalized world (Garcia-Acevedo, 2008).

### **Liminality, communitas and Mexican migration**

While there are cultural and social organizations that serve the needs of Mexican immigrants, the primary focus of most is employment and residency. As a result, many

members of the Mexican diaspora are removed from connections with integral parts of their cultures. Mexican farmworkers that are removed from their families, as well as the families they left behind exist in a state of constant liminality. Turner (1969) defined liminality as individuals or ideas that are located in the gaps of social structures, actively exist in society's margins and/or occupy the lowest social standings. The diasporic experience in both Mexico and the United States exemplifies this definition. The limnal condition of farmworkers and their families creates what Turner called "communitas" (Turner, 1969). Communitas describes the "relationship between concrete, historical, idiosyncratic individuals" (p. 131). If societal structures use classification systems to separate individuals, communitas functions existentially to examine "the whole man [sic] in relation to other whole men [sic]" (Turner, 1969, p. 127). For Turner (1969), "communitas emerges where social structure is not" (p. 126). The communitas evolving from the immigrant experience to the farmworker reality is at once immediate and concrete, spontaneously developing from the interaction in United States culture as a marginalized person. Turner explained that communitas is only accessible when set against or combined with elements of society that highlight the marginal aspects. For communities in Mexico, the limnal existence of community migration means altered family routines and structures. These communities are frequently impoverished and rural, politically disenfranchised, and undereducated.

Understanding this aspect of farmworker reality lays the foundation for designing outreach initiatives that account for liminal conditions of constant change. Nonprofit organizations work throughout the country to address these concerns and help

communities navigate social and economic separation. Mexico's reality offers the opportunity to evaluate and study the outcomes of trade liberalization and agricultural development policies and their effects on daily life.

CHAPTER V

CASE STUDY:

ORGANIZATIONAL DISCOURSE OF THE BINATIONAL  
AGRICULTURE RELIEF INITIATIVE

**Methodology: Critical development studies and the critical-rhetorical ethnography**

A critical perspective helps inform the understanding of how nonprofit and non-governmental organizations function from the standpoint of management and development studies, respectively. Using critical theory's traditions of understanding, Srinivas (2009) focused on the knowledge required to manage NGOs, ethical consequences of managing and using said knowledge, and the interests (primarily political) that the knowledge serves. Within the critical perspective, knowledge is comprised of unquestioned assertions and the intellectual foundation of the field. The concept of ethics draws from a perspective of ethics as the work of self-formation aimed at binding the self to the idea of good (Critchley, 2007). The multiple interests the knowledge serves highlight the use of agency as an exercise of power.

Critical development studies involve the monitoring and evaluating of development programs and strategies with the focus being on improvement and accountability. Those engaging in critical development studies see development work as the means to support long-term change. The emphasis on evaluation allows administrators and managers to quantify what actions are taking place and what outcomes are achieved. Srinivas (2009) referred to this as the technicization of development- the reliance on checklists and procedures to create more formal structures

for development interventions. This strategy is used by many NGOs to create ways to assess program effectiveness and standardize innovation delivery. Yet, Srinivas raised the questions, “But to what extent does such technicization actually generate development-related results? And at what cost to the autonomy of the local people who are ultimately the targets of intervention?” (Srinivas, 2009, p. 620). A critical perspective when studying NGOs creates opportunities for highlighting resources that encourage the reflective practices of managing and operation. In this way, multiple perspectives are considered, and the communication content is evaluated with the communication structures. The instruments and approaches may influence adoption and or diffusion of development strategies in the long term. Standardization of approach and “best practices” may be the functional goal of the organization, yet the rigid structures may discourage experimentation and program sustainability.

The communicative elements of critical development studies evaluate the discourse generated by a particular organization to evaluate the effects in local participation. It is beneficial to keep in mind that spatial connections have moral and political implications for development work. Kaag (2011) addressed the necessity of speaking to local cultural and community values in addition to global economic imperatives. She wrote,

Until now local development has mainly been defined as “local development” that is “development bounded to a certain place.”

Generally, an outside intervention is seen to create change in a certain locality. Even in so-called bottom-up approaches, the focus most often



remains rather local, at the “bottom,” with little elaboration of the linkages to higher and less local levels. (p. 472)

She argued that globalization creates many dense connections between locations, and that an upward and outward-looking perspective aids in determining a particular locality’s relationship to the world. By encouraging the adoption of this translocal perspective, she makes the case that capacity building can only accomplish certain goals without material building in communities that often lack physical resources to interact on the global scale. Communities experiencing the effects of migration are particularly relevant to this perspective, as members may be located around the world. Discourse addressing communities must address the complex web of social and economic networks contributing to and flowing from a particular community.

Embracing the value of the spatial as a dimension of development expands the scope of what nonprofit organizations that focus on human resources can address. Not only can programs offer benefits for human behavior and interaction, but they can also offer improvements to the quality of conditions in which populations live, by improving connections with the community’s global network, and in this case, the Mexican diaspora living in the United States. Kaag (2011) explained that groups working to connect diasporic communities create opportunities to identify and gain moral support from and to extended networks. This is particularly relevant when studying Mexican farmworker families, as every community has family members that have migrated north.

### ***Ethnographic approaches in organizational research***

Qualitative methods in organizational research offer perspectives based on penetration and reflection (Maanen, 1979). As the study proceeds, design is adapted, changed, and redesigned in order to account for and incorporate the realities of researching lived experiences (Janesick, 1998). The researcher becomes the instrument for the study, using perceptual tools to generate a holistic portrayal of the situational reality (Guba & Lincoln, 1981). Qualitative research is ideologically driven, and it is necessary for the researcher to identify her biases in order to better inform the study as beliefs and behaviors of participants are interpreted (Janesick, 1998).

Derived from the theoretical perspective of symbolic interactionism, ethnographic research attempts to discover emic meanings and perceptions of experience in conjunction with social contexts in which the participants live (Crotty, 1989). Ethnography draws from the assertion that to understand a specific phenomenon, you must evaluate the behaviors of its practitioners. For the ethnographer, the most significant commitment is to construct a “faithful and accurate rendition of the participant’s lifeways” (LeCompte & Goetz, 1982, p. 54). An experiential approach to exploring organizational contexts, both internal and external, helps determine opportunities for capacity building by analyzing how connections are made with other societal factors—local, state, and federal governments, families, cultural institutions, and economic systems (Markowitz, 2001).

Biggs and Matsaert (2004) emphasized the lack of and need for ethnographic research in natural resource development to better expose intersections of public, private,

and civil society and address institutional dimensions of innovation. Critical ethnographies creates perspectives of understanding that highlight processes of connection, constitution, contradiction, and power relationships within and across differing spatial scales (Hart, 2006). The generative and creative form of ethnography creates informed accounts that are effectively self-conscious (Bishop, 1992) and allows for the exploration of the culture of an organization.

Geertz (1973) explained culture as the webs of significance humans create and exist within. Cultural analysis is an interpretive search for meaning, questioning the “why” and “how” of meaning, behavior and their intersections, in addition to “what.” To make culture more comprehensible, ethnography requires long-term engagement with the observed population, in a number of cultural settings and circumstances in order to elucidate the everyday from the exceptional experiences.

Scholars addressing various types of ethnographic analysis offer a number of entry points for this study (Hymes, 1964). Fundamentally, as Geertz (1973) asserted, ethnographers “begin with our own interpretations of what our informants are up to, or think they are up to, and then systemize those” (p. 14). As organizations create specific forms of knowledge to carry out work (Levin, 2003; Smart, 1998), organizational identity is formed. Studying an NGO should consider the organization’s role as a global-local mediator, grassroots support organization (GSO), and the overlapping dynamics of transnational identity (Markowitz, 2001).

Theory’s place in ethnography is to “provide a vocabulary in which what symbolic action has to say about itself—that is, about the role of culture in human life—

can be expressed” (Geertz, 1973, p. 26). Organizational ethnography addresses the cultural form and social system of organizations, which focus on goal-oriented activities (Rosen, 1991). Compared to ethnographies of residential contexts, organizational ethnographies differ due to the internal and external factors involved in organizational participation. Participants are not bound to membership, but select experiences based on commitments and personal factors. Organizational culture is often ambiguous, partial, and due to shared interests and goals, political in nature (Rosen, 1991).

Interpretive ethnography records a specific community’s discourse in order to create an account of intellectual collaboration, but is mindful of the relationship between engagement with and detachment from the participants being studied (Smart, 1998). This balance aids the researcher in portraying the intersubjectivity of data while recognizing additional perspectives on the experience. Analysis of ethnographic data involves discovering the hierarchical and non-hierarchical structures of meaning within the observed population. When conducting ethnographies with NGOs, Fisher (1997) recommended attention to three sets of issues for analysis:

1. How discourses about NGOs create knowledge, define sets of appropriate practices, and facilitate and encourage NGO behavior defined as appropriate.
2. How complex sets of relationships among various kinds of associations, the agencies and agents of the state, and individuals and communities have had an impact in specific locales at specific times.

3. How we can avoid reductionist views of NGOs as fixed and generalizable entities with essential characteristics and contextualize them within evolving processes of associating. (pp. 441-442)

Ethnography does not employ a single method of data analysis, but instead utilizes a variety of strategies, with the goal of “describing and interpreting observed relationships between social practices and the systems of meaning in a particular cultural milieu” (Lindlof & Taylor, 2002, p. 16). Using “thick description” as a means to record observations helps researchers sort out personal perceptions and biases of participants’ constructions of behaviors and contexts. Description of the flow of social discourse is interpretive and aids in determining the values of observed situations. The task of transforming social discourse from an occurrence in a particular moment into an account creates the opportunity for reconsultation in the future (Geertz, 1973). When studying an organization, an ethnographer can begin with the needs of the group and work to develop research goals that are harmonious with issues in social science. An ethnographic study can influence participants in real time, and offer the researcher the freedom of in the moment reflexivity and the ability to modify approaches and analyses in regards to experiential factors. Additionally, scholars of folklore and folk practices have a unique opportunity to engage non-academic communities through advising and improvement projects, due to their in-depth knowledge of cultural behaviors and values (Rahn, 2006). Sambatti et al. (2001) demonstrated this in their study of folk taxonomy of Cassava to understand agricultural practices.

When considering the concept of reliability, the primary problem for ethnography is that the process is not standardized, making replication difficult. When generating, refining, and validating constructs, replicability is not always required. LeCompte and Goetz (1982) identified five issues ethnographers need to address when evaluating external reliability: “Researcher status position, informant choices, social situations and conditions, analysis constructs and premises, and methods of data collection and analysis” (p. 37). To reconcile this tension, ethnographers should use thick description not only to describe their subjects, but also to describe their practice. Another issue is that of internal reliability, as multiple ethnographers may not perceive a situation the same way. Strategies proposed by LeCompte and Goetz (1982) to account for this include use of: “low-inference descriptors, multiple researchers on the same topic, participant researchers, peer examination, and mechanically recorded data” (p.41).

Internal validity is the problem of whether the conceptual categories of the research have shared meanings between the participant and observer. For ethnography, the threats to internal validity that need resolution are: “history and maturation, observer effects, selection and regression, mortality, and spurious conclusions” (LeCompte & Goetz, 1982, p. 44). To evaluate external validity, the applicability of findings to other populations is considered. Ethnographers can begin by paying attention to what information emerges that may have relevance to similar populations. LeCompte and Goetz (1982) identified four effects to account for in ethnographic research to address external validity: “selection effects, setting effects, history effects, and construct effects” (p. 51).

### ***The critical-rhetorical ethnography***

Used to study locally-situated vernacular rhetorical discourses that articulate against oppressive macrocontexts, the critical-rhetorical ethnography is an appropriate methodology for this study due to its juxtaposition of critical rhetorical and ethnographic perspectives (Hess, 2008, 2011). By observing and participating within vernacular advocacy, this study will illuminate the strategies used by the Binational Agriculture Relief Initiative to create and sustain advocacy discourses. Hess (2011) articulated three elements for consideration in a critical-rhetorical ethnography: invention, *kairos*, and phronesis. Ultimately, this type of analysis gauges rhetorical effects, advocacy, and learned wisdom.

Critical rhetorical analyses use textual analyses in order to unpack messages for evaluation and exploration. Typically this seeks to determine the efficacy of persuasion, ideological articulation, and narrative coherence. Hess (2011) argued that too much critical rhetoric addresses big-picture discourses instead of discourses of the everyday experience. He devised the critical-rhetorical ethnographic method to offer scholars a “locally situated and experiential approach to the process and production of rhetorical texts” (Hess, 2011, p. 128). The design of the method encourages an “insider perspective on the lived advocacy of individuals and organizations that struggle to persuade in public for changes in policy, social life, or other issues that affect them” (Hess, 2011, p.128). Direct participation is at the heart of this methodology through enactment and embodied practice. Engagement is enacted through embodying the spirit of the organization, its activities and operations. It is not only an inquiry into advocacy, but the vernacular

advocacy that comes from co-creating the experience as a participant. The critical-rhetorical ethnographers must develop the self as an instrument in order to understand her role in performing qualitative inquiry. The value of experiential wisdom, or phronesis, aids in this process. Also, the immersion of the ethnographer within the organization offers perspective on the process of invention and advocacy throughout the development process (Hess, 2008).

Hess (2011) stated, “Embodied advocacy, as performed and witnessed under ethnographic conditions, provides critical rhetoricians with an opportunity to not only maintain a critical attitude toward discourse but also connect research practices with activism” (p. 129). Positioning rhetoric and participation in this manner increases the understanding of rhetoric as a tool to teach civic behavior to the public. The critical-rhetorical ethnographic method is directed at a public audience, since the emphasis is not only about seeing deliberation as it occurs, but also participating in the action that results from the decision-making processes. For the scholar, the immediacy of exposure to power relations and decision making allows insight into the creation of ideology, and how that ideology is crafted into organizational discourse.

#### *Critical rhetoric and power discourses*

McKerrow (1989) articulated the need and niche for critical rhetoric to illuminate the character, content and function of power within discourse. As critical rhetoric developed through ideological criticism, power relationships and structures emerged as foci. Ideological criticism is focused on how discourse encourages values and beliefs through the manifestation of ideology. Each organization or culture includes its



ideological fingerprint in its practices. Examining how this ideology fits and functions with an organization or culture's behaviors is necessary to see how the ideology is expressed. As ideologies become entrenched in culture, there is a potential for those with power to have more control over which ideologies are more predominant.

Hegemonic ideology is a representation of the experience of those with more power. An ideology becomes hegemonic over time, as more and more groups within a culture allow particular ideas to become the dominant norm. Foss (1996) explained that hegemonic ideologies must be continuously constructed, renewed, reinforced and defended via rhetorical practices. Some examples of these include religion, family, the media, government programs, the legal systems, and popular culture. Hegemonic ideology also limits responses to its dominance. Resistance has limited opportunity, as the dominant discourse is often created with messages that preemptively disarm the discourse of resistance (Foss, 1996).

*Vernacular discourse and participatory studies*

Rhetorical scholars study the production of everyday vernacular discourse through participatory studies, and as a result, expand and articulate the notion of what is a rhetorical text. Hess (2011) explained,

“Text,” in these cases, does not only constitute the recording of speech; rather, the text has become something living, breathing, and operating within unique spaces and received by particular audiences. In short, rhetorical scholars have turned toward *in situ* and everyday processes of textual production and reception. (p. 130)

Text may also reflect the cultural content of physical spaces, as affected by humans. D. F. Brown (2007) emphasized cultural constructions inherent in landscapes, and focused on the use of agricultural landscapes as texts in geographic studies in order to expose cultural value systems. Similarly, critical-rhetorical ethnography may also examine the interactions with and discourse addressing physical contexts by organizations. Further, existing agricultural landscapes provide a physical text of political decisions, economic shifts and community priorities that contribute to better understanding of local social processes and explaining how social and cultural factors are encoded into spatial dimensions.

Hess's (2011) theoretical position was that critical-rhetorical ethnography is the "means to examine the socially and locally situated judgments of vernacular or outlaw discourses as they contribute to their own material and discursive realities" (p. 131). This builds upon the model of vernacular rhetoric advanced by Hauser (1998):

We cannot begin to appreciate the importance of rhetorical expressions of public opinion if we limit ourselves to an instrumentalist rendition of communication as a variable to be manipulated, or limit our discursive readings to institutional discourse at the expense of actively considering the vernacular exchanges in which we detect publics and discern their opinions. (p. 95)

Within any form of public deliberation there competing and conflicting advocacy discourses. Studying how vernacular discourses "self-articulate within the public sphere" is improved by immersion with the groups creating the discourse. Additionally, the

participatory approach enables criticism to be “enacted as advocacy; speaking and advocating alongside those who seek changes to the status quo” (Hess, 2011, p. 131).

Changing the status quo entails the use of public communication, typically in the form of advocacy. Public reasoning is not engaged by experts, as it is impossible for an entire population to be trained to address every issue. Troup (2009) argued “the matters for rhetorical deliberation are collective and public, not individual and specialized” (2009, p. 466). This emphasizes the role of the general public as capable thinkers that can deliberate effectively about community issues. Hauser (1998) explained,

A person becomes good at deliberating by knowing how to resolve a problem in line with the views of those being addressed, and the choices of wise men and women reflect their experience in dealing with human problems subject to deliberation. (p. 96)

Working with and within vernacular discourses focuses on how non-specialists communicate about issues affecting their communities. How the public positively and negatively frame their experiences articulates their shared interests and values.

Support for public deliberation focuses on improving contextual factors and creating opportunities to involve ordinary people. As Hauser (1998) explained, “publics may be repressed, distorted, or responsible, but any evaluation of their actual state requires that scholars and leaders engage in analysis of the rhetorical ecology as well as the rhetorical acts, including their own, by which they evolve” (p. 104). Qualitative research aids in evaluating organizational and public discourse in real time, as it pertains to the daily lives of participants. Studying vernacular discourse as it is created and

enacted offers insight into how information emerges, how a public understands an issue, the vocabularies used to discuss the issue, and the opinions formed through everyday exchanges (Hauser, 1998, 2007, 2008).

Troup (2009) described how the 20<sup>th</sup> century was a time where the role of public deliberation diminished due to managerial rhetoric that casts “experts” as those conducting public opinion polls. Troup (2009) argued that public opinion polls are passed off as “the will of the people” (p. 450), but pay little attention to vernacular discourse. Agricultural surveys utilizing quantitative methods may similarly neglect vernacular discourse. While a sample may be derived from a population, it may not always be the most representative. The structure of survey administration, even with the best intentions, often neglects vernacular and civic discourses that address participation in favor of technological and managerial discourses of innovation. Since most agricultural development work addresses possible improvements to the day-to-day lives of its targets, focusing on vernacular discourses is appropriate.

As an applied methodology, the critical-rhetorical ethnography aids in creating space to tell every day stories about the usefulness of communication theory.

Communication is shown to be the meaningful organizing locus for how our worlds are rendered visible, personal, and real. Conversations—or the absence of them—are often foci of how humans learn to make, reveal, and do.... Ours is the challenge the subjective makes to the objective. Our goal is not to reject one over the other but to combine what is best about

these two ways of being in the world and thinking about it, into a far more powerful tool. (Goodall, p. 188)

In the field of international agricultural development, to borrow from Goodall, how we write and the stories we tell create our discipline's axiology of and for knowledge. If these accounts are to be valuable and useful to others, we must include critical voices that communicate the lived experiences of worker, student, and advocate.

This case will have relevance for organizations working in transnational contexts, as well as academics studying internal dynamics of non-governmental organizations.

Fisher (1997) noted,

There are relatively few detailed studies of what is happening in particular places or within specific organizations, few analyses of the impact of NGO practices on relations of power among individuals, communities, and the state, and little attention to the discourse within which NGOs are presented as the solution to problems of welfare service delivery, development, and democratization. (p. 441)

Markowitz (2001) affirmed the importance of ethnographic work with NGOs, noting the value of identifying how organizational vision and identity are expressed in mundane tasks such as meetings and correspondence. Organizational ethnography aids in the elaboration of informal relations, understanding organizations as systems of meaning, illuminating the interplay between organizations and their environments, describing organizational change, the role of ethics and normative behavior, and the circumstances of control, politics, and power (Fine, Morrill, & Surianarain, 2009).

### **A critical-rhetorical ethnography of the Binational Agriculture Relief Initiative**

This study uses an ethnographic approach to capturing the complexity and intersections of a United States-based nonprofit working in Mexico with local agricultural communities. This is achieved by incorporating the voices of those travelling with the BARI to Mexico, farmers and their families, other local nonprofit organization members, local governmental leadership, community members, and an agricultural expert with decades of experience in the region working to improve and restore agricultural practices. Fieldwork was conducted in the Mexican state of Jalisco, the city of Guadalajara, the municipality of Cuquío and its surrounding ranchos over a 10-day period in July 2010. To ensure confidentiality, I use a different name for the NGO, group member identity is anonymous, and community member names are changed. The application of the critical rhetorical ethnographic model helps reveal the theoretical principles of the 7Cs model of ethical development communication. The goal of this analysis is to evaluate the BARI's ability to persuade/inspire future involvement and how it develops its presence in Mexico.

Fieldwork for this study included collecting accounts in fieldnotes, following the tradition of Geertz's (1973) thick description. Over the course of the project, field notes were used to document experiences, contexts, reactions, and questions. As a means of connecting myself to the advocacy of BARI, my fieldnotes helped connect my personal and academic backgrounds to the experiences of working with the BARI. Previously, I lived in Mexico as part of a study abroad program and studied the Aztec chinampas, an agricultural method in use for centuries, outside of Mexico City. It was there I was first

exposed to the effects of NAFTA's neoliberal policies on agriculture, as well as the influence of changing urban/rural demographics on agricultural traditions. I worked in the highlands of Guatemala teaching pit composting methods to indigenous farmers and there I discovered my passion for working in rural communities in developing nations. Additionally, as a means to connect to other agricultural advocacy organizations with which I am involved, I connected similar conflicts, strategies, and discoveries to issues in other global contexts. This adheres to guidelines for critical-rhetorical ethnography (Hess, 2008, 2011) which state, "Fieldnotes become both observations of interactions and reflections on how the advocacy is performed, working toward the accumulation of practical wisdom" (Hess, 2011, p. 142).

I participated in group interviews with indigenous farmers and farmworker families while travelling with the BARI in July 2010 to Jalisco, Mexico. Participants were local community members that had prior contact with Dr. Sarita Valles and the BARI. Interviewees told us of their life experiences and then BARI group members asked follow-ups. Interviews were conducted in Spanish, and group members served as translators. We met many families on their farms and they recounted their experiences with migration, farm work in the United States and Mexico, experiences with local economic assistance programs, attempts to organize farmer cooperatives, the history and viability of traditional *maiz criollo* varieties, and opportunities for organic production.

While observing and participating with the BARI in Jalisco I kept detailed fieldnotes that help inform this study. I used a common pattern for fieldnotes dealing with cultural practices (Goodall, 2000). The pattern included keeping a detailed

chronology of the trip that emphasized how small vignettes created overall events. Descriptive and emotional details were built into the field notes to maintain a sense of timeliness and to record reactions in specific moments.

The purpose of a resistant vernacular organization is to create discourse that operates in vernacular contexts yet confronts larger-scale problems. As a resistant vernacular group, the BARI's advocacy challenges contemporary discourse that dehumanizes and discriminates against immigrants in the United States. Projects include "reality tours" where participants spend a day working in typical farmworker conditions in Watsonville, California, and are paid the wage of a farmworker for their labor. There is also opportunity for participants to witness stories and interact with farmworker families in their home environments. The experience of witnessing has rhetorical strength for participants, who can then spread their experience and amplify the voices challenging immigrant treatment and policy in the United States, while bringing awareness to the reality of farmworker life.

Pezzullo (2007) articulated the goals and influences of reality tours like those sponsored by the BARI. Ideally, participants experience recognition and identification with the people, places, and ideas confronted through the tour experience. Through this alignment of identity through experience, *phronesis* emerges. Grounding her conceptualization of advocacy tourism as the performance of witnessing in order to promote identification, Pezzullo (2007) highlighted the experience of experiencing the visible and the banal.



As an organization, the discourse generated by the BARI rhetorically constructs a learning environment for participants where advocacy can be safely assumed, or “tried on,” as a means to generate experience that leads to sustained advocacy. This is accomplished via the learned wisdom from a participatory experience working directly with and for relevant populations. The BARI’s work requires direct participation and observation to unpack messages about the larger context of farmworker rights and advocacy. Combining face-to-face interaction with educational messages about economic, social, and political conditions of farmworkers is the strategy utilized by the BARI to construct its message.

BARI’s work is an appropriate context for exploring critical-rhetorical ethnography within the discourse of agricultural development, farmworker advocacy, and immigration due to the emphasis on member participation in serving the organization’s mission. As such, I ask the following questions about BARI’s advocacy: How does BARI construct its organizational discourse pertaining to farmworker advocacy during its international programs? What strategies are explored to increase knowledge of and participation in the BARI’s mission? Also, does the discourse of the BARI compete or correspond with other forms of agro-globalization messaging?

### ***The Binational Agriculture Relief Initiative in Jalisco***

The Binational Agriculture Relief Initiative, in a partnership with the Justice Initiative, a nonprofit organization focusing on human rights, sponsored a trip to the cities of Guadalajara and Cuquío, Jalisco, Mexico to meet with farmworkers and organizations supporting agricultural and community development. Participants

volunteered for the trip. Those in the San Jose, California area attended a preparatory meeting to discuss schedule, sign waivers, and be oriented to the social and political contexts of the trip. I was unable to attend this meeting, but received an information packet with articles addressing: globalization and immigration, Mexico's economic troubles, NAFTA and the political economy of Mexican immigration, and the struggles of Mexico's working class.

The BARI's work on this trip focused on the state of Jalisco, in west central Mexico. Jalisco's total population is around 7.5 million people, and around 1.5 million reside in the state's capital, Guadalajara (INEGI, 2010a). Approximately 40% of the population is not educated past the eighth grade (INEGI, 2010a), and the average education in Cuquío is only to grade six (INEGI, 2010b). The average daily salary in Jalisco is 55.84 pesos per day (~6USD). Unemployment rates for men and women are 5% and 2.5%, respectively. The state has a number of local ecosystems including grassland, forest, and jungle (INEGI, 2010b). Cuquío is a rural municipality where one-quarter of the homes are headed by females, which is lower than the one-third of homes headed by females in Jalisco (INEGI, 2010b). Maize is the primary crop in Cuquío agriculture, accounting for 60% of hectares sown in 2009 (INEGI, 2010b). Other crops grown in the municipality are forage oats, green chile, bean, green tomato, wheat grain, and sorghum (INEGI, 2010b).

Upon arriving in Guadalajara our group met at the airport and stayed at a traditional adobe that had been converted to an eco-hotel. During our dinner that evening, Isaac, the owner explained the improvements to the space that lessen the

environmental impact of the hotel (E. McCann, 2010g). These included low flow water fixtures, on-site food growing, and composting. He gave us an overview of efforts to improve agriculture's environmental impacts with which he is involved (E. McCann, 2010g). In addition to the hotel, he manages an organic community-supported agriculture program that provides fresh organic produce from local farmers to its subscribers.

The first full day in Guadalajara began with breakfast and was followed by a morning with Dr. Valles to see the city plaza. After lunch we visited one of only three ecotiendas in Mexico, stores focused on fair trade and organic products. The purpose of the store is to develop a consumer market for items produced organically. The store is supported by the Jalisco Environmental Project (JEP). After visiting their store, we visited the JEP's headquarters, to learn about their efforts to increase knowledge and consumption of organic goods (E. McCann, 2010f). In their vision, consumers and producers both require education in order to create systemic change. They publish a bimonthly newsletter that addresses a variety of issues including public access to information about the environment, corn and its relationship to culture and rural farmers, as well as market development for sustainable products (E. McCann, 2010f). The members of the JEP taught us about the organic certification system in Mexico, and how its current cost is a deterrent factor. Having worked for the Rodale Institute, a nonprofit in the United States with similar goals, I was not surprised when the JEP members discussed challenges to their mission. Common problems included: consumer information about organic advantages, challenges to conceptualizing long-term costs of

industrial food, time issues in organic certification, and lack of farmer organizational structures and training supporting organic agriculture.

Currently, the JEP is advocating for a participatory guarantee system in place of formal organic certification (E. McCann, 2010f). This method is used in Brazil and India. It prioritizes membership in a farmers' market, and all decisions regarding membership are made by local and regional experts and consumers in regards to production standards. Classifications expand the traditional all –or-nothing organic rubric with options that include: certified organic, transitional organic, natural (wild/gathered products), and agroecological, meaning it was grown in a manner that mimics nature without the trappings of industrial cultivation (E. McCann, 2010f). The participatory guarantee system encourages farmer to farmer education. It also provides technical training and support for the farmer to transition to organic production. We discussed options for growth and partnerships to coordinate agronomists for training support for local farmers and expanding the growing power of existing community-supported agriculture (CSA) models by partnering with the farmers in the Cuquío area (E. McCann, 2010f). In a CSA, members purchase a “share” of a farm's crop production for the season and receive weekly shipments of produce from the farmers. The foundation of the idea is that it helps secure farmer production through small investments. It financially protects against seasonal loss since the season is financed by members (Cone & Myhre, 2000).

On the afternoon we left Guadalajara for Cuquío, a police truck and minivan pulled up to our hotel to escort us. Most group members laughed at the police truck full

of our luggage yet were somewhat uncomfortable with the two automatic weapons slung around the bodies of the police accompanying us (E. McCann, 2010h). On the drive we saw agricultural production in the countryside and see how polluted waterways were. On the road, Dr. Valles explained the prevalence of agrochemical advertising throughout the countryside. In fact, the majority of advertisements we observed were for agrochemicals, soft drinks, and political parties. Ads ranged from small handmade signs nailed to fence posts to mural-size advertisements painted on the sides of barns and homes (E. McCann, 2010h).

#### *Cuquío, Jalisco*

Cuquío's municipal population in 2010 was 17,795 (INEGI, 2010b). The municipal center has a city plaza and park that is the center of town. Farmers from the surrounding countryside bring crops here to sell. On the side streets of the plaza there are many small businesses. The city's market has a variety of produce stands and is connected to the main plaza, with an upstairs that has stalls where vendors prepare meals. There were signs throughout of U.S. culture including popular music coming from a store, large trucks with flashy paint jobs, and local residents telling us about their time in the United States when we were running errands in the municipality (E. McCann, 2010h). The surrounding countryside was visible from many vistas around town, and the presence of agriculture in the local economy was evident in the number of fertilizer and agrochemical stores.

We stayed in one of the few hotels in Cuquío. Our group occupied all but two rooms in the hotel. There were two group members per room, and each shared one key

that was not to leave the hotel. Since there was only one copy of every key, if we wanted to leave the hotel we had to deposit the key with the person at the front desk. A typical day in Cuquío began with wakeup around 7 a.m. Many members of the group got up and went for early walks around town. Around 9 a.m. we would meet at the hotel and head to the market for breakfast. Breakfast consisted of tortillas, chilaquiles, beans, cactus, eggs, and an assortment of fresh fruit. We would have a short break after breakfast to do small chores for our afternoon visits: packing shoes and toys, purchasing a cake and fresh fruit assortment, and preparing the daily piñata (E. McCann, 2010h).

On July 23, we had a meeting with a local government official, Oscar Chávez, who is mayor of the municipality. He began by telling us that Cuquío's population was 4,122 residents, with 16, 236 in the surrounding municipality (E. McCann, 2010d). Oscar Chávez described conditions in the region that influence agricultural production. In 2009 there was a drought that lowered yields from 6 tons/ha to 1 ton/ha (E. McCann, 2010d). He offered details about the existing programs in Cuquío for supporting rural populations. The Oportunidades program aids 120 residents with 500-1000 pesos (50-100USD) every two months. His goals as an elected official included increasing education in the municipality (E. McCann, 2010d). Currently, there is no university in the community. It is his hope to partner with funders to build a technical school to train residents in industrial engineering, engineering administration, and engineering in sustainable agriculture. Another community development pursued during Chávez's tenure was digging wells to increase irrigation opportunities for agricultural production.

Oscar Chávez spoke of the urgent need for economic development that created incentives to counteract the presence of drug cartels. He explained that the average daily income in the municipality was 150 pesos (~15USD) per day (E. McCann, 2010d). With a job in construction, that increases to 300 pesos (~30USD) per day. If a resident works for the cartels, she could make 4500 pesos (~450USD) per day. Remittances to the region from family members working abroad are decreasing due to the recession in the United States. He told us the average price for a coyote, a person who guides migrants to the United States without immigration papers, was 5000 USD (E. McCann, 2010d). He spoke of similar municipalities with high murder rates and the formation of a coalition of municipal leaders to address cartel issues. His concern was based in his perceived connection of the national political party, *Partido Revolucionario Institucional* (Institutional Revolutionary Party, Spanish acronym PRI), to drug cartels. He spoke about preventing PRI candidates from being elected, even though PRI is considered to be the most centrist political party in Mexico (E. McCann, 2010d). He feared if the PRI wins elections that the cartel violence will increase since PRI responses are inappropriate.

The current administration of President Felipe Calderón is attempting to wage war on the cartels with domestic military forces. Calderón is a member of the *Partido Acción Nacional* (National Action Party), which is the most conservative of Mexico's three major political parties. Oscar Chávez explained that when military intervention increases, so do the number of deaths. His solution is to embrace strategies that negotiate with the cartels. While explaining this, he took a moment to express his frustration with

the federal integration of neoliberal policies that increase foreign investment, but prevent profit reinvestment in local economies (E. McCann, 2010d).

Chávez had known Dr. Valles for years, and donated police escorts and vehicles for us to use on our travels. Our group discussed how open and friendly Chávez was during our time with him. One group member remarked, “I thought he’d be more corrupt!” Dr. Valles explained to us that we needed to remember that no matter what country we were in; politicians were still politicians and would never “bare teeth” in an interview. Chávez owns an agricultural chemical company in the town, and some group members were convinced this made everything he told us about regional agriculture suspicious.

*A visit to Oscar Chávez’s property*

On July 27, we visited one of Mayor Oscar Chávez’s houses. Cuquío received funding to construct an aquaculture operation to raise fish to sell to food packagers. Oscar Chávez volunteered his land as space to build the operation in order to save the city money (E. McCann, 2010m). There is a house on the property, but it is primarily used by construction worker friends of Oscar Chávez. A swimming pool and large pavilion were in progress on the property. Later in the trip, a few of Cuquío’s citizens would tell us that they referred to that pool as “our pool” since they were certain taxes were paying for it (E. McCann, 2010j). Oscar Chávez tended around twenty head of Brahman cattle which were fed and watered at this location.

Oscar Chávez told us about the plan to train farmers to tend tilapia farming operations. The increase in local jobs from the operation would stimulate the local



economy and help financially stabilize farm families (E. McCann, 2010m). Inside the aquaculture operation we saw six giant tanks that were the basis of the pools where tilapia would be raised (E. McCann, 2010j). Most were empty or filled with water that had been sitting long enough to turn brownish green with algae growth. A plastic lawn chair floated in one of the tanks that was full of unmoving green water (E. McCann, 2010m). During other parts of the trip, we asked other community members what they knew about the tilapia operation. The opinions we received had more to do with perceptions of governmental corruption, addressing the concern that Oscar Chávez would charge rent to the municipality when he was no longer mayor, profiting from the deal he made with the city (E. McCann, 2010i, 2010j). Farmers felt the mayor had little incentive to prioritize the program's success, since the longer it lasted, the more they thought he hoped to gain.

*Meeting with local agronomist Daniel Melendez*

On July 25, we met with a local agronomist working to save Mexican *maiz criollo* varieties, Daniel Melendez. He began with the statement, “when we eat *frijoles* (beans) we forget our English” (E. McCann, 2010c). He followed with an explanation of Mexican culture being subsumed by the North Americanization of culture. By this statement he meant conspicuous consumption habits, and gave examples of changes in music and the number of flashy vehicles that were increasingly common in the region. He described what he sees as a clash of worldviews between globalization and rural needs. In his eyes, local issues are best handled locally, and foreign corporate investment does more damage than it assists indigenous populations. He then stated that 90% of

seeds grown locally are from Monsanto as an example of how endemic foreign companies had become in local agricultural production (E. McCann, 2010c).

Melendez's work promotes organic methods with minimal detrimental inputs. While he recognizes the inherent environmental problems with using detrimental inputs, he recognizes the economic inflexibility of many rural farmers. Higher yields mean more profit, and Daniel Melendez sees these profits as opportunity to create long term improvements that support organic production (E. McCann, 2010c). His methods involve using compost with a small bit of fertilizer. He claims that yields of *maiz criollo* grown this way can be 7+tons/ha, which is competitive with chemical methods that yield 7-10 tons/ha on average (E. McCann, 2010c). His long-term goal is to build cooperative farming organizations that offer training and support for growers using organic methods.

*Meeting with a local microlending organization*

In the afternoon of July 25, we met with Gloria, a representative of the Jalisco state government that promotes microlending in Cuquío through a local microlending organization, of which she is president (E. McCann, 2010e). Accompanying her were Marco, the treasurer of the association, and Rafael, a community advocates who worked with the group. The goal of her organization is to increase economic self-sufficiency in the region by assisting local residents in obtaining small loans. The program started in 2000, with an initial group of 57 receiving loans, but they now have 280 members (E. McCann, 2010e). Gloria explained that 50% of the loan recipients are women. Due to the support of the federal government, the microlending association offers a lower interest rate on loans than most banks. Their current rate was 2.2% monthly (E. McCann,

2010e). She told us there were 28 microlending cooperatives like hers in Jalisco, and their primary job is to educate loan recipients about the loan programs and negotiate with the bank regarding loan requirements (E. McCann, 2010e).

To qualify for a loan, farmers need 10% of the loan up front, to protect against failure to repay (E. McCann, 2010e). The microlending association gets a loan from a bank, and then divides that money up between those receiving loans. When deciding who gets loans, the priorities of the microlending association are crop production, livestock production, and small business startup fees (E. McCann, 2010e). Once farmers have the loan, they plant their crops, and only make payments on the loan's interest during the growing season. At harvest, the balance of the loan is due to the microlending organization.

Currently, Gloria's organization is attempting to gather seed money so that they can set their own interest rates, independent of the banks. Because of the higher interest rates of large banks, many microlending organizations fail because they cannot generate enough money to build the business foundation. Due to a history of good behavior and prompt repayment, the association received 300,000 pesos (~30,000 USD) from the government that they used to fund more loans and to pay the interest rates on their existing loans (E. McCann, 2010e). This aids the organization in maintaining high standing with banks in case farmer tragedy prevents repayment.

Fraud is an issue the cooperative deals with regularly, Gloria told us. All three members shared stories about visiting farmers who had remarkable crops growing, yet when it came time for loan repayment after harvest the farmer claimed the crops were

lost. Marco explained that the farmer may find a buyer for the corn and sell it, then claiming the loss (E. McCann, 2010e). The microlending association requires collateral for the loan, so most farmers use their property as collateral. Rafael told us that if a farmer cannot repay the loan, that they do not seize the land (E. McCann, 2010e). Instead, they end their relationship with the farmer and offer no future loans. If crop loss is not fraudulent, the farmer is permitted the following year to borrow 150% of her previous loan (E. McCann, 2010e). The previous loan is paid off, with some funds remaining for agricultural investment. The farmer must then pay monthly interest on the larger loan until repaying it in full after harvest.

During the interview, group members asked a number of questions about farmer expenditures with the loan money. One group member asked if farmers were buying improved seeds and agrochemicals, or if they were using the money to aid in a transition to organic production (E. McCann, 2010e). Rafael told us that “the old ways don’t work” and that farmers wanted to grow the highest yield possible, so many used the funds to purchase hybrid seeds and fertilizers (E. McCann, 2010e). The conversation with the microlenders turned to what guidance they provide for farmers using their funds. Gloria explained that they did what they could to connect farmers to training opportunities, but there were not many. She went on to restate that her organizations goal was to provide and support the loans, letting the farmers decide how they spend the money.

### *Visiting the ranchos*

During our afternoons in Cuquío we would visit the ranchos in the surrounding countryside. Ranchos are small villages that are populated mostly by small-scale

farmers. Each location we visited one family's home, and members of other families came to join us. There would be anywhere from one to three houses visible from the location, and the families that joined us at the ranchos lived within a few miles. Each home was modest, and all the families worked to grow their own food near their house. At each rancho we would have a piñata party for the local children, distribute donated items, tour the surrounding land, and/or hold informal unstructured interviews with one of the people living at our host's home.

We travelled in one of the municipality's police trucks, with two armed police escorts. Everyone in the group responded to the escorts' AK-47s. We made jokes to ease the tension surrounding the possibility of the weapons' use (E. McCann, 2010h). Toward the end of our week, the police told us that they preferred coming with us to a regular day's work. For them it was a break in their routine and they confessed to enjoying tres leches cake (E. McCann, 2010i).

Dr. Valles first met some of the families we were working with when she was writing her doctoral dissertation. She met many farmworkers in California, and then travelled to Mexico to meet their families and learn the story taking place on the other side of the border. From her initial visits the concept and mission of the Binational Agriculture Relief Initiative emerged. Over time, she increased the activities of the trip. Her initial visit focused on delivering messages and aid from family members in the United States that were unable to return. On her visits she learned about living conditions in rural Mexico as altered by migration. With each trip back to Mexico, the

scope and mission of the work expanded from information gathering to providing aid and afternoon parties for the children of the ranchos (E. McCann, 2010i).

As we drove to our destinations, people we passed came out of their houses to wave, greeting Dr. Valles and following us to the ranchos. When we arrived at the ranchos, we greeted everyone with the customary handshakes and “*mucho gusto*.” The homes where we met with the rancho residents were small brick and adobe structures. At Los Sauces de Pérez (“Pérez’s Willows”), the first rancho we visited, we could see the two separate building phases of our host’s home. The first was with smaller adobe bricks likely made by the families, and the second was with newer, more uniform, bricks that were a result of the government program aiding in home building. 0

At Los Sauces de Pérez we began by introducing ourselves to all the people at the rancho. Then we waited for what would happen next. Eventually Dr. Valles said, “We’re just waiting for the rope to show up” (E. McCann, 2010h). Eventually a rope was located and the piñata was lifted, beginning the festivities. At every rancho the piñata was what the children were most excited about. From shortest to tallest they would line up and take turns swinging at the piñata while singing the traditional piñata song. Momentary bedlam set in once the piñata broke, and after the scramble for toys and candy we distributed the items we’d brought: shoes, clothing, toothbrushes, school supplies, and light bulbs. Although we were encouraged to be mindful and distribute goods evenly, there were some complaints that people didn’t get the shoes they wanted, or that one family received more toothbrushes than another (E. McCann, 2010h). Dr. Valles later explained these comments increased every time she visited, as people began

to have expectations regarding the donations they received (E. McCann, 2010h). These site visits were not only a time to observe those living on the ranchos, but also our chance to interact with and learn from them.

Interacting with the children was a highlight for most of the group members. At Ojo de Agua Colorado, once the rope was up for our piñata, we were still waiting on a few families to arrive. The boys of that rancho decided to use the opportunity to climb the rope. It became an exhibition of one boy grabbing the rope and climbing as high as he could, with many reaching the tree branch about 14 feet up. One of our group members climbed the rope and received a round of applause from the children and men when he reached the top (E. McCann, 2010b). Throughout that visit the children gravitated toward the man who climbed the rope. There were anywhere from 12 to 17 children at each rancho. After every piñata, there would be a toy distribution and while the children played with their new toys, group members and rancho residents spoke with each other.

There was a notable absence of men at many of the ranchos we visited, as men between the ages of 12-adult typically leave to find work opportunities elsewhere. The Ojo de Agua Colorado rancho had the most males of any of the ranchos we visited. In this particular rancho, Dr. Valles told us that alcoholism among men was an issue. Because of the alcoholism, she explained, the men made no attempt to leave to go work. This was a point of shame in the communities, as Dr. Valles explained the sentiment as, “you know whose man isn’t prioritizing his family” (E. McCann, 2010b). Although there

were men present, they stayed off to the side talking to each other when we held our interview with Mercedes, the homeowner (E. McCann, 2010b).

After the food and items were distributed at each rancho, we would mingle for a while with the people in the community. After thirty minutes we would begin the interview. Set up for the interview was usually with one community member telling his or her personal experiences as a farmer and/or migrant. For most participants on the trip, this was a highlight. The richness of taking the time to engage the story of the farmers enabled deeper understanding. Many times, members of the group were moved when they realized how these farmers struggled. The questions of group members guided the interviews, which both aided and interfered with the flow of the interview at times (E. McCann, 2010i).

At Los Sauces de Pérez we interviewed Octavio, a farmer who spent years as a migrant worker in the United States. First emigrating at age 12, Octavio travelled to the United States without the visas required for a Mexican national, with the help of a coyote. Coyotes are paid a fee by farmworkers or family members in the United States that ranges from 30,000-50,000 pesos (3000-5000 USD). Travel with coyotes often entails hiking through terrain for days with limited food and water supplies (Lopez, 2007). Octavio lived and worked in Californian agriculture in a migrant camp for one year before his foot was hurt while working (E. McCann, 2010a). The treatment he received in the United States was ineffective, so he came back to Mexico, where medical treatment prevented amputation. During the interview he stated that the reason he made no more attempts to go back to the United States was his emotional connection with his



family. The land he farms is over a mile from his home. On the family's homestead he plants squash, beans, and corn intercropped. Farming focuses on corn production from June until December. In the winter months, farmers forage in the surrounding hillsides for *camote*, a tuber similar to sweet potatoes (E. McCann, 2010a). Near the home was a small shack with a recently farrowed sow and her piglets. Throughout the rancho there were a number of ducks and chickens.

After the interview the group went on a hike to one of the local bodies of water where rancho residents bathe and do laundry. A group of children led us. As we hiked, Dr. Valles explained elements of the local ecology and offered the challenge to the children to find tadpoles. Her ability to use every moment as a teaching moment decreased the formality of her leadership and invited participants to be active learners during portions of the trip that were physically demanding (E. McCann, 2010h). Once at the small pool of water, one group member asked quietly, "is this where *everyone* washes?" (E. McCann, 2010a) We observed the water and talked to the children, who explained there was another place they played and swam as well. On the hike back, one group member talked about how she liked showers too much to live on a rancho (E. McCann, 2010h).

We interviewed Mercedes while visiting Ojo de Agua Colorado on July 25. She had five daughters ages 6-23 (E. McCann, 2010b). She illuminated the challenges to educate children for rural residents. While children could attend through grade 5-6 for an affordable cost, higher grades had increased tuition. She presented us with another inherent conflict of development work. When improvements such as getting computers

into schools are made there are costs for operation and maintenance (E. McCann, 2010i). In this case, parents absorb the cost as a tuition increase and for each child to attend high school.

Mercedes lives with her four youngest daughters, and grows the majority of her food. Her family's diet consists of corn tortillas, beans, and eggs. During productive years, she grows enough corn to sell, but the most she'd ever sold was 800 pesos (~80 USD) worth in one year (E. McCann, 2010b). Her brother helps her grow corn, beans and squash. She told us that they grow hybrid corn and use chemicals, but use no protective gear such as gloves or masks. In her yard there were a number of empty chemical bottles that some of the children played with. She receives 740 pesos (~74 USD) every two months through the Oportunidades program, which is the only time she leaves her rancho.

One issue that arose with the interview questions being guided by group members was the candid nature of many questions. After a particularly complicated translation, one group member remarked that the questions were "too much like journalism homework" (E. McCann, 2010i). It was not unusual for a group member to press an interviewee about a question that could easily be perceived to be too personal or traumatic to answer. For example, Mercedes discussed her family members that migrated to the United States decades before. She told us she had heard nothing since they left. A group member asked, "So you've never talked to your brother?" and Mercedes replied "no" (E. McCann, 2010b). The follow up question was "do you think your brother is dead?" To which Mercedes replied that it was very painful to think about

such things (E. McCann, 2010b). We watched Mercedes slump in her chair. She stopped making eye contact with group members for a few moments and stared at the ground. At this point the translator asked that questions not be so personal and potentially difficult to answer (E. McCann, 2010b). In response, a group member asked “What would you say if you had a chance to talk to the President of Mexico?” (E. McCann, 2010b). She looked at the ground for a few moments and did not answer. We ended the interview shortly after.

On July 26 we travelled to the border between Jalisco and neighboring state Zacatecas to visit Rancho Nuevo and our hosts Amilcar and Elisa. On a prior trip, Ann had secured a donor to donate an old minivan to this rancho so that there was an opportunity for the children to attend school. By far the most remote location, it was on top of a hill in the mountains over an hour outside Cuquío. When we arrived, many group members commented that the view from the house, over miles and miles of mountains, was “just like Lord of the Rings” (E. McCann, 2010l). Local agronomist Daniel Melendez travelled with us to meet with the farmers.

At this rancho, Amilcar’s wife, Elisa, prepared a meal for everyone attending the gathering. Dr. Valles was diligent about food consumption safety, and since the home had no refrigeration, the food had been sitting outside since before our arrival. There was group tension about whether or not we would eat the food, and how to politely navigate that situation (E. McCann, 2010l).

Our time at Rancho Nuevo was the shortest of our visits due to the distance we had to drive. After the piñata, we spoke in a small group in a short interview with

Amilcar. He intercroops his *maiz criollo* with squash and beans and uses minimal urea fertilizer. We visited their water collection tank, and observed the pump system that sends water to the homes. Amilcar's family eats the food they grow in the milpa. Other food sources included fruit trees, gourds, and livestock (E. McCann, 2010l). Our interview was brief so that Amilcar and Daniel Melendez could spend more time working together. Dr. Valles then asked a local woman to lead us on a hike to their other water source. A steep trek through the woods later, we saw the creek where washing and bathing was done. When we returned, we took a few group photos and it was time to head back to Cuquío. We stayed just busy enough to not eat the food, while the rest of the rancho's residents enjoyed the spread (E. McCann, 2010l).

At Varaz Dulces July 27, a Hector and Rosario told us of their struggle to grow food. They have nine children, three of which still live at home (E. McCann, 2010n). One son lives in the United States and sends money to them. Rosario receives 770 (~77 USD) pesos every other month through Oportunidades, the aid program Oscar Chavez described to us that supports local poverty reduction. Their land holdings are only half a hectare. He told us that he had more land, but sold it off by the hectare to have enough money to resolve debts (E. McCann, 2010n). Hector grows *maiz criollo*, but since the soil is not healthy, the roots do not support the tall stalks in the wind. Their home is surrounded by corn fields, with few natural windbreaks. Hector told us they would buy improved seeds if they could afford it, as he hoped to increase their food supply.

Rosario said that March and April were difficult months, and they usually had no food (E. McCann, 2010n). The rest of the year their diet was primarily beans and

tortillas, with almost no fresh fruit. The couple was in their 60s, and Rosario has a heart condition that required medication they could not afford, even with the free health care they receive through government. After their interview, one group member went up to the woman and said, “In the United States I am poor just like you. I eat many beans and tortillas, too” (E. McCann, 2010n). This attempt at expressing solidarity was received kindly, but Rosario had what I interpreted as a confused look on her face as she looked at the digital camera and recorder in the group member’s hand (E. McCann, 2010j).

July 28 was our last site-visit to Agua Blanca. There was a young woman who was part of the housekeeping staff at our hotel who joined us. She was from Agua Blanca and had not been home in months, because she lives in Cuquío with her sister. We met the community at their cement volleyball court in the middle of town. A local tienda operator approached us to say there were mostly women and children in the rancho because all the men were working in the United States (E. McCann, 2010k). One income generating opportunity in this community is a chair-making business, and when we were getting the piñata started, community members brought us each one of the chairs to watch the festivities.

Dr. Valles led the group on a hike after the cake and distribution of supplies. We did not hold a formal interview at this location, because Ann’s contacts were no longer in the area. Dr. Valles and I separated from the group while they hiked a cattle trail, and we went to examine the stream nearby. The stream was small, and we searched for insect larvae and tadpoles. When frogs are healthy and reproducing, the amount of larvae in the water is diminished because the frogs eat it. We found very few indications that there

were frogs at any stage in the area, as there were many insect larvae in the water (E. McCann, 2010k).

At this point in the trip, I think there was a lot of fatigue among my group members. Conversations I overheard on our travels indicated this. One group member discussed it with me over dinner one night, calling it the “analysis paralysis,” of the experience. She explained that sometimes it felt like she could only hear so many people tell stories about the conditions they lived in without being overwhelmed (E. McCann, 2010j). She spoke of how comfortable her life in the United States was when compared to those we visited. While she had her own struggles, she felt they paled in comparison to what we witnessed. Yet, at the same time, she felt unable to fully comprehend the situations we visited. The confusion, she felt, inhibited her ability to concentrate on the work of the future because she was taking longer than she was comfortable with accepting the present (E. McCann, 2010j).

### **Applying the 7Cs ethical model to the Binational Agriculture Relief Initiative**

In this section, using critical-rhetorical ethnography as my guide, I examine how the BARI utilizes elements of the 7Cs ethical model to construct its advocacy, and the particular challenges confronted. This analysis offers insight into program strengths and weaknesses. Further, group member observations and interactions reflected elements of the BARI’s rhetorical efficacy in turning lived experience into advocacy.

### ***Collaboration and the Binational Agriculture Relief Initiative***

The ethic of collaboration addresses inclusion in decision-making processes. It helps determine if stakeholders have access to knowledge that informs decision-making.

Collaboration promotes the involvement of participants in decision-making processes. This ethic establishes communication processes that create and maintain positive social relationships.

Collaboration is a core value for the BARI. Participants were asked to contribute to the organizational goals and engage in aid delivery. Program participants were expected to contribute to and participate in aid delivery at the various ranchos we visited. Participants also were expected to engage in interviews we conducted with cooperative members in Jalisco, elected representatives in Cuquío, and with farmers and families we visited. When we arrived in Cuquío, there were a number of errands to run and jobs to be done before each trip. Shoes, supplies, and toys needed to be separated to ensure fair distribution. Fresh fruit and vegetables were shopped for at local markets. All of the travelers on the trip had functions within the group, and the individual's ability to follow through on group chores affected the group's collaborative efficacy.

The purpose of the meetings and interviews over the course of the trip was to get a better scope of the circumstances affecting indigenous rural populations in Jalisco. Dr. Valles constructed a schedule that explored issues affecting agricultural production at the farm and government levels. As an end result, the hope was for the group to brainstorm ideas for future collaborations with Dr. Valles and the BARI.

The farmers we met expressed the desire to increase partnerships with educational, lending, and training organizations. Yet, they expressed frustration at the lack of resources devoted to developing local markets and maintaining food security. As the trip progressed, we brainstormed more ideas for connecting Daniel Melendez with

the JEP to aid local farmers in transitioning to organic production. Because Daniel Melendez's methods include the use of urea fertilizer, it could be beneficial in the early stages of transition. Increasing the collaborative ethic with the BARI's partners in Mexico was a goal of the trip. By the end of our time, we had a number of ideas to pursue in the future including: creating a CSA in collaboration with the JEP to bring produce from Cuquío to subscribers in Guadalajara, working with the farmers we met to design plans to continue organic production with the assistance of the microlending association, and assisting Daniel Melendez in creating collaborative training modules for local farmers.

### *Challenges to Collaboration*

For the Binational Agriculture Relief Initiative, there were some emergent and inherent barriers to collaboration between group members and with community organizations. First, the diversity in participant experience and background did not always work to the BARI's benefit. Facing abject poverty in person is by no means an easy undertaking, as one group member described her "analysis paralysis." Seasoned development professionals still wrestle with the daily realities of those receiving assistance, as Dr. Valles reminded us daily. One woman on the trip had previously traveled to developing countries on resort vacations. As a nurse, she brought skills to the trip that would be helpful in sight-speculation regarding health conditions. However, her lack of experience in dealing with global/rural poverty meant that her initial reactions were often emotional and material rather than diagnostic and substantive. This decreased the efficacy of her participation in collaborative tasks. Before arriving at the first village,



she wanted to discard some of the shoe and toy donations because she felt that donated items should be brand new. This was in conflict with previous group decisions that everything we brought as a donation was appropriate for distribution. Another issue was one of the men on the trip not participating in some of the group tasks because his job was to handle the money for meals and lodging and he explained that was sufficient. His refusal to participate in the same manner as everyone else challenged the spirit of equality on the trip, as his refusal often extended to his partner who was also on the trip. The refusal to collaborate within a small group of people creates conflicts in power dynamic and group decision making.

Challenges to collaboration in local contexts were discovered through our meetings with local populations. Government support for our trip was evident, as the mayor gave us free use of local van or police trucks for our trips to the ranchos. Collaboration with the government in the future was in question, but the potential was explored as development projects were discussed. Oscar Chávez respects Dr. Valles's commitment to the area, and told us in our interview that we could collaborate if the BARI had plans that were harmonious with funded community development initiatives.

Working directly with local families would provide the biggest challenges for collaboration. Because the families we met with experienced so many factors contributing to their marginalization and struggle, the largest issue facing BARI was where collaboration could begin. Further, due to the BARI's history of providing "hand outs," collaboration is still an element that needs exploration and development for the organization. Development scholars remind us that giving is not an appropriate

development intervention, as it offers the least in regards to long-term sustainability. Dr. Valles collaborating as an individual versus the BARI collaborating as an international organization are two very different undertakings. Improving collaboration is in some ways easily accomplished, yet changes in the BARI's operation are perhaps necessary.

### ***Culture and the Binational Agriculture Relief Initiative***

The ethic of culture accounts for the appropriateness of the development initiative with regards to local cultural structures and values. It considers local languages and cultural practices such as appearance, social behaviors, and time constructs. The ethic of culture also considers the roles of nature and technology in local systems.

Participant pre-training for the trip was oriented toward preparing participants for the logistics of the trip, while presuming some level of knowledge about the context we were entering. Group members travelling from California had two meetings prior to the trip where logistics and travel advice was provided. The information in these sessions ranged from purchasing grapefruit extract to add to bottled water to suggestions for carrying and exchanging currency. Clothing choices were recommended that were appropriate for site-visits. Members of the group that were fluent in Spanish planned to serve as translators for those with less Spanish comprehension.

Food culture was one aspect of culture that aided group members in comprehending local culture. Food is an appropriate juncture between outside intervention and native culture empowerment. Bunch et al. (2010), emphasize the opportunity of agricultural development initiatives to work at this intersection, primarily due to the ubiquity of food. Every population has a vested interest in creating the most

viable food supply and increasing community food security. Engaging members to participate in food decision-making builds public participation, which ultimately enables more democratic and just circumstances. An understanding of food values and the role food has played in a culture's history provides a frame with which to approach communities.

In this case, when working with Mexico's indigenous populations, understanding the importance staple crops like beans and corn have played in the survival and resistance of indigenous culture helps prioritize the use of those crops in development initiatives. Additionally, this perspective provides an interesting material contrast to the plantation system that initially took land from indigenous populations in order to grow exotic and exportable foods like bananas and coffee. Instead of farming to raise food for someone else while increasing dependence on the world market system for survival, new initiatives can promote ecologically and culturally responsible ways to increase local food security that embrace traditional food values and further empower indigenous populations.

The relationship of food to cultural comfort is well documented (Goode, 1992; Mintz, 1996; Torres, 2003). Throughout the trip, food commentary was a running theme of common ground for the group. The food system blogger, in her write ups of the trip commented on almost every meal eaten while in country. As Torres (2003) explained the desire for domestic food sources is a driver in international tourism. Group members that didn't identify themselves as workers instead of tourists experienced this difficulty, while those of us that were there to work were filling out pockets with avocados and

bananas for snacks all day. In fact, here the issue of self-perception registers the difference in participants between *workers* and *tourists*. Other options for the BARI to improve its emphasis on culture include preparing and providing training manuals for volunteers and program participants that give voice to program beneficiaries while educating outsiders.

The experiential interpersonal/interaction aspects of the BARI's group members made it difficult at times to fully engage those whom we met as part of the trip. The group had 4 members fluent in Spanish and another 3 with international Spanish experience. There was always a need for translation, since very few people that we met spoke English. Comprehension in our meetings was good, but there was always a chance we were losing something in translation. Frequently, two group members would ask the same person at a rancho the same question and get different answers.

Culturally, the programs and opportunities the BARI promoted in Jalisco were concurrent with traditional value systems. Daniel Melendez mentioned that traditional values and practices were fading in the neoliberal era of conspicuous consumption. As many farmers told us they wanted to grow genetically-modified seeds with agrochemicals, but could not afford it. The dilemma is one that illuminates contemporary conflicts between the global and the local. As global economic incentives encourage small farmers to compete in larger markets, the local economic structure collapses.

### *Challenges to Culture*

Primary challenges to maintaining the ethic of culture include traditional views about women in Mexican culture, technological limitations, and BARI participant cultural knowledge. Within traditional Mexican culture, the role of machismo, the embodiment of masculinity, is the norm (Lopez, 2007). Men claim cultural rights to women's subordination in the home and in the public domain. In the ranchos, there were very few men, so women had to assume traditionally-masculine roles in order to feed their families and generate income.

Technological challenges to maintaining the ethic of culture include specific issues with detrimental inputs, rejection of indigenous corn species, and language content of advisory information. For farmers who are encouraged to use fertilizers, herbicides, and pesticides struggle with product packaging since product advisories and toxicity information is rarely printed in Spanish. Further, relying on written information to educate an population with low literacy rates increases the challenge to making sure innovations are presented in culturally-appropriate means.

The time frame for the trip was appropriate for the BARI's goals. Ideally, our trip would establish connections and increase participant understanding of local cultures. Our afternoon at each rancho often felt short. One group member seemed determined to hear one complete life story at each rancho, and on the ride back every time would ask if we could go back to that rancho in place of one of our other visits. It is interesting to consider what different experiences and knowledge a trip like this could inspire if we went to the same rancho for the full week, and were able to complete a full project for

one family. The fatigue of group members toward the end of the trip could also indicate we spent too much time in Cuquío.

Group members on the trip were encouraged to dress conservatively, which is typical for anyone working in international development. Some of the participant challenges with interacting in local culture included one female member of the group who did not want to wear a brassiere, shirts with sleeves, or shoes other than sandals. Dr. Valles communicated to the group before the trip that modest attire covering knee to knee and elbow to elbow was expected. During the trip, the issue was repeatedly addressed, as the group member attempted to leave the hotel braless. Dr. Valles always referenced her early years working in the area, thinking a tank top was suitable, and then feeling that members of the community were staring at her, and some even made physical advances, blaming their candor on her “revealing” clothes. Dr. Valles knew from experience, and tried to share that with members of the group to maintain the BARI’s ethic of culture.

Upon arriving at each rancho another group member would approach the host and insist on posing for photos immediately. Privately, Dr. Valles expressed frustration with this behavior as she felt it objectified the people we visited, and communicated a representation of the hegemonic power of the United States. She was uncomfortable with the idea that our group was coming in as anything but equals to the people we met. Some members of the group began calling this behavior “the conquistador” in reference to the Spanish colonization of the Americas. These challenges are typical as group members acclimate to differences in cultural values and contexts.

As group members struggled with the physical realities of this international aid trip, at no point did we stop as a group and have a discussion about the immersive nature of this type of work. At times, it felt like our capacity to discuss the experiences we were having in terms of brainstorming for improvement was diminished by the time we used addressing the culture shock some group members were experiencing. Culture shock of international work and service is an issue that sometimes gets addressed in preparation, but it seems as if few professionals working in these fields know how to adequately address culture shock when it happens to group members. During my previous international living experiences with educational and service groups, the experience of culture shock negatively affected participant attitudes which led to diminished group productivity and social fracturing. Managing the culture shock of another involves a degree of interaction that may make members of the group uncomfortable. Organizations that neglect this vital aspect of cultural maintenance risk expending unnecessary resources dealing with individual problems.

### ***Community and the Binational Agriculture Relief Initiative***

The ethic of community includes strategies for engagement with the local community. Organizations should identify local leaders and identify existing community infrastructure. Members of the local community aid in determining program priorities and form positive social relationships with development practitioners.

Community is one of the core values of the Binational Agriculture Relief Initiative, because the idea that communities in disparate locations are still connected undergirds the BARI's mission. Building communities is the solution the BARI

envisions to address rural poverty, failing economic development, and increased migration. Strong, supported, sustainable communities attract outsiders and keep families growing.

Dr. Valles did an excellent job explaining the key community leadership to us at various phases of the trip. Working in the same communities for a number of years aided her knowledge of communication and power behaviors and structures. She would explain past interactions with community members to help us frame the experience ahead of time. Her knowledge of personal issues and information about community networks was invaluable to creating an understanding of the interpersonal contexts in which local populations function.

After our formal interviews at the ranchos we had “free” time to speak to community members personally. We also had the opportunity to go on hikes, visit other homes around the ranchos, and/or get a closer look at what food was growing around the rancho. This unstructured time was ideal for the BARI group and community members to interact. This also enabled BARI volunteers to observe familial ties and cultural behaviors in a less formal manner than the interviews. At the end of each day, different group members shared stories about the interactions that took place during the unstructured time. One of the more surprise interactions took place at the first rancho we visited. At the end of the visit, half the group waited with a group of returning farmers at the local tienda for the other half of the group to return from a hike. The farmers purchased bottles of soft drinks and stood around the shaded area. After a bit, one farmer jumped away from the wall he was leaning against and began stomping on the ground.



He lifted his boot to reveal a dead scorpion. We asked the nurse in our group what to do in case of scorpion attack and she replied, “go to a hospital.” It was momentarily lost on her that we were 20 miles from town and not near a medical facility. Instead, she pulled an iPhone from her purse, did some research, and began interviewing the man for signs of shock. During her questions, he told us that this was his eighth scorpion sting. Voices at the tienda erupted with laughter after his confession. She spoke of this experience later that night, reflecting on taking for granted her own access to care as a member of the medical community.

### *Challenges to Community*

Geographically, the communities we visited are far from each other. Families on the ranchos do not have access to a variety of forms of transportation to travel from one place to another. It is difficult getting farmers away from their homes in order to meet with other farmers. The food scarcity and poverty issues farmers experience creates conflict in planning innovations that require off-farm meetings. Physical distance increases farmer disconnect from each other, preventing the establishment of connections that form the basis of community.

Lack of trust in government initiatives is a common condition in the municipality of Cuquío. Members of the town refer to the guest house on the mayor’s property as “our house” and one community member told me, “it’s our money that builds his swimming pool.” The suspicion of financial corruption runs deep, as evidenced by the saying, “There is no clean money in Mexico.” Without the necessary trust in democracy and democratic processes, citizens are reticent to discuss options for building community

with the government as a partner. When asked in interviews, farmers said they felt like local government programs offer some assistance, but not the advantages they sought. Farmers did not communicate an advantage they perceived from advocating for development changes. The Mexican government's history of dealing with indigenous people in rural areas does not improve their ethos in the eyes of rural citizens. One resident of Cuquío told me he split his time between the United States and Mexico. He remarked that the government in Mexico was as "stupid" as the government in the United States. He explained that money was the bottom line, and as long as the money got passed around between the "big guys" everything was fine.

### ***Conservation and the Binational Agriculture Relief Initiative***

The ethic of conservation emphasizes behaviors that address environmental issues on the local level. Organizations benefit from identify existing conservation practices and issues in the community. Development initiatives should consider negative environmental impacts and ecosystem benefits of potential technology use or product integration.

The Binational Agriculture Relief Initiative's commitment to the ethic of conservation is one of its strongest advocacy messages and is supported by programs create future opportunities. One project the BARI is currently raising funds for is a conservation center for the region that will eventually educate and serve as a center for the exchange of ideas and practices regarding agricultural development in the region. Specifically, Dr. Valles envisions the conservation center to aid in local development that returns a sense of local pride to agricultural producers.

Dr. Valles's background in ecology is beneficial to promoting a conservation ethos via the BARI's programs. One goal she discussed with the group on a number of occasions was her desire to communicate the existing signs of environmental degradation most associated with industrial agricultural practices. At every rancho we visited, Dr. Valles would challenge the children to find tadpoles. Los Sauces de Pérez was the only rancho on this trip where tadpoles were found. One boy brought back around fifteen in his left hand. Dr. Valles then told the children that tadpoles meant their water was healthy. Then, as she turned to speak with our group about how tadpoles are often an early indicator of ecosystem disruption, the boy dropped all the tadpoles into the closest puddle around the corner of the tienda where we were assembled. We watched a couple of chickens peck around the puddle for the next few minutes.

Dr. Valles emphasized the BARI's role in aiding the dissemination of scientific and technical knowledge associated with the harms of industrial agriculture and agrochemicals. As a leader of the group, she employed a number of different methods for explaining the scientific "hows" of environmental depletion and conservation. She focused much of her energy on creating connections for our group so we would understand the nuances and intersections of the environment and agricultural practices. She highlighted visual cues to identify different types of erosion, soil health, water health, insect, and plant life. Learning elemental forms of identification for the region in which we were visiting aided our group in connecting ecological conditions to their causes. A lack of tadpoles means diminished numbers of aquatic insect larvae in the water caused by pollution from local agricultural runoff. Dr. Valles often incorporated

questions about these indicators in our interviews with farmers, which prompted our interviewees to discuss connections to nature.

On the local level, conservation efforts varied sometimes by inches. There would be a compost pile, and next to it discarded agrochemical bottles. At the ranchos we visited there were different indicators of conservation efforts. Mercedes family's home, with its small garden plots and composting was surrounded by an industrial cornfield that was showing signs of soil erosion and nutrient deficiency. In other areas, *maiz criollo* was visible in plots growing intercropped with squash and beans in the traditionally- named "the three sisters." The intercropping system relies on the crops covering the soil to preserve soil health and increase nutrient content post-harvest through stalk decomposition.

The work of Daniel Melendez focuses on the existing environmental conditions in light of historical and cultural traditions within agriculture. His methods and seed supply for growing corn preserve biodiversity and move in the direction of improving soil health with the ultimate goal of conservation. Daniel Melendez's reliance on compost as the primary fertilizer for *maiz criollo* has the added benefit of adding nutrient material to the soil. Improved soil conditions also increase the long-term sustainability of food production in the region. As far as direct and physical conservation, Daniel Melendez's assistance with the BARI is harmonious with the BARI's mission.

### *Challenges to Conservation*

During our interview, Oscar Chávez stated that, "the United States always sends us the worst of everything." Pesticides banned from sale in the United States due to

health and environmental dangers are on the shelves of stores in the most remote Mexican villages. In fact, paraquat, which is banned in the European Union ("Kindom of Sweden v Commission of the European Communities," 2007) and only available with a license in the United States ("Facts about Paraquat," 2006), can be purchased easily in many Mexican villages. Making the situation worse is the fact that safety information accompanying many chemicals is not printed in Spanish, which prevents farmers from learning about potential harmful effects (Lopez, 2007).

One challenge to conservation is existing farmer knowledge regarding agricultural practices. Octavio told us much about his methods of production. He grew the traditional intercropping of the three sisters: beans, maize, and squash. He knew that he had enough success growing in that method that there was not much incentive for him to innovate. He also considered the only available innovations to be those that increased use of detrimental inputs. Part of his hesitation in using detrimental inputs in his food production was his experience in the United States and how unpleasant working in industrial agriculture was for him. While Octavio's methods are good for the soil and help conserve the quality of his particular parcel of land, the incentives to move to detrimental inputs are great. Little remains to reinforce the preservation and protection of the soil from a policy or market perspective.

Another challenge to conservation is the existing market and incentive structures that move policy decisions in the direction of conservation. Currently, most development focuses on increasing yields so that farmers have more to sell, which theoretically increases farmer income. Without an economic infrastructure to support both production

and market issues, the necessary soil improvements are not made. Empowering a conservation ethic that is concomitant with economic incentives is necessary to strengthen conservation efforts.

Conservation efforts on the individual farmer level can be encouraged by program support and educational resources for farmers growing food organically. Without an understanding of the long-term benefits available to farmers, there is hesitance to use organic methods. There is not the stigma against organic farming, as there is in the United States, yet there is still the notion of “Keeping up with the Floreses.” No one wants to be left behind the curve of having new innovations.

***Capacity and the Binational Agriculture Relief Initiative***

The ethic of capacity addresses the ability of the community and development workers to function in a given situation. Capacity includes the things a community/village is capable of accomplishing based on motivation, resource availability, and time. Capacity is forward-looking and prioritizes transfer of leadership to local communities. Ultimately, this ethic considers human and natural resource availability and limitations.

For the BARI’s work in Jalisco, capacity was an incredibly limiting factor. Primarily, thinking of our trip in terms of time, the biggest limitation was our contact hours, as we only had a day to meet with each individual rancho. More time would have been beneficial for group members to connect and learn about life on the ranchos. Internal capacity of the BARI was affected by group member attitudes, and external capacity was affected by resource limitations of local communities.

The internal capacity of the BARI was sustained by group member commitment to issues addressed by the BARI. With the preparation before the trip, where each participant had a primer on issues addressing communities served by the BARI. For whatever reason the participant chose to attend the trip, their commitment level and understanding of trip tasks was part of the BARI's functioning. Part of the group's capacity was addressed after a stop at a shoe factory. A few group participants being more interested in the labor issues associated with the factory wanted to take time away from visiting the ranchos to discover more about the factory or other similar local factories. Conversely, one group member expressed wonder at the amount of work he was doing in addition to what he had expected. He said, "I've never thought about what these living conditions are like. I want to do all I can while we're here, and I still know it's not enough." Most group members expressed similar sentiments over the course of the trip.

Externally, the service aspects of the BARI's work address issues of local capacity in the United States and in Mexico. Capacity includes the willingness of local authorities to participate in development initiatives. In this case, every local group with whom we met expressed their own unique capacity and its affecting factors. With the JEP their capacity was good in terms of public outreach, access to customers, understanding of communication campaigns, and technological knowledge in educating the public regarding advantages to organic food and agriculture. Their work on outreach was excellent, and they discussed with us that they felt limited by staff and space limitations.

Farmers on the ranchos in Cuquio were limited in their capacity to make improvements. Limitations which stemmed from financial circumstances prevented farmers from seeking education, making home improvements, and purchasing agricultural tools that would aid in food production. Most farmers not owning a mode of transportation also limited their physical capacity to get into town to sell crops or to meet with other farmers to build community.

### *Challenges to Capacity*

One of the first discussions we had as a group that focused on challenges to the ethic of capacity was with the members of the JEP. Organic certification in Mexico presents challenges to the capacity of organizations promoting its benefits. Asking farmers to find another source of income while changing the method of production on the farm is a difficult interpersonal undertaking. When we spoke with the JEP, the microlending association and agronomist Daniel Melendez, the primary concern was increasing the carrying capacity of the soil in order to achieve higher yields. For all farmers, increasing yields means increased income opportunities, and understanding existing constraints on capacity is necessary.

Externally, challenges to capacity are focused in two primary areas: governmental and farmers. Historically, Mexico's governmental support for rural farmers has been encouraging, yet incapable of results that were lasting or tangible. Torres (2003) attributed this governmental inefficiency to the climate of political corruption that devalues small-scale production. Basically, private and public resources are dedicated to projects based on priorities of a corrupt system. As can be expected, this



rarely benefits the general population. Within the municipality of Cuquío, there was not much collaboration between the farmers we met with and the government programs with regard to planning. Resource priorities were determined by federal mandate and governing interests. When considering that Oscar Chávez owns a fertilizer sales company, opportunities for farming to avoid detrimental inputs are against his personal financial interests.

Without existing infrastructure for implementing development initiatives, the BARI must create its own niches for programs. The amount of work required within the community presents a challenge to the internal capacity of the BARI. The groups we met with in Cuquío have a history of interactions with each other. The BARI's mission is to aid in fostering group collaboration on projects. Yet, to jumpstart some programs, previous intergroup conflicts need to be addressed, adding another needed skill to the BARI's repertoire.

Internally, the BARI group had its own capacity challenges. At times, participant mood, attitude, prejudices and physical capabilities were challenges to capacity. Cultural issues of capacity were apparent with issues of overall grumpiness regarding quality of lodging and food schedules. The group began the trip at a high-end eco hotel in Guadalajara, but for the majority of the trip stayed in a hacienda-style hotel in Cuquío. The hotel rooms were damp, had mosquitos and very little natural light. There were many complaints about accommodations, with attributions made about hotel room quality to group members missing some trips. One group member with a particular sensitivity to fluorescent light and television waves struggled with many of the physical contexts of

travel. Each room had one key for two people and the hotel staff, causing security concerns for some group members. A group member expressed concerns about the staff members searching through personal items during room cleanings, but no disturbances happened during the trip.

Torres (2003) explained, “studies suggest that North American tourists demand more familiar home country foods due to more conservative consumption patterns and a fear of food-related illness.” While participants were told that we would be travelling to an area with local cuisine, the expectations of food availability and variety and the reality were surprising to some group members. The small market where we ate all of our meals was only open certain hours. Dr. Valles advised that Dona Inez would be preparing all of our meals, which consisted of traditional Mexican food. We ate meals as a group, and since each person’s meal was prepared individually, there were often long waits for our food. Group members brought a variety of fruits and other vegetables to the meals to share and supplement. However, a few participants began eating less and wasting more food at meals as their confessed “boredom” with the food selections increased. Both women, who spoke limited Spanish, expressed frustration at not being able to ask for what they wanted to eat as a contributing factor. The lack of food consumed in these cases later in the day would cause both to complain of grouchiness caused by hunger.

Another factor affecting internal capacity was the number of other issues requiring development interventions that we witnessed. One example was a shoe factory located on the outskirts of Cuquío. During our interviews, many farmers mentioned

working in the factory was one option for employment for young people, especially women. We heard conflicting reports about working conditions and pay. As we returned from a rancho, our driver pointed out the factory and members of the group urged him to pull over. When we stopped, most of the group got out of the van and ran toward the factory. One group member that opted not to go quipped, “What do they think this is, Dateline?” Those at the factory were peering in windows and taking photos through cracks in the door. After a few moments of this, someone came out from inside and let the group enter. They were allowed to tour the factory and speak with some workers. They were told that breaks were limited and pay was sparse. When they returned to the van, one group member expressed disappointment that the conditions were not worse, although they were not ideal under any circumstances.

One issue dramatically influencing the BARI’s capacity is the consistency of volunteers and group members. Since the organization and its mission comes from the vision of Dr. Valles, her continued involvement has been the one uniting factor keeping the work going. When it comes to organizational development and growth, it is practically impossible to accomplish the organization’s goals with only one leader (Block & Rosenberg, 2002). Dr. Valles’s grand vision for the BARI is limited in that the organization’s development does not match the pace of her ideas.

### ***Care and the Binational Agriculture Relief Initiative***

The ethic of care fosters an understanding of feedback processes, privilege, and power. Part of this concept is rooted in decreasing community reliance on outside aid.

Holistically, the ethic of care addresses the likelihood of program success on myriad levels.

Identifying the human experience of the farmworker enables those working with the BARI to care more for other beings, and engage in humanitarian goals. One focus of our interviews was to get as much feedback from farmers as we could about their experiences. While this may have been too inquisitive at times, in other instances it was beneficial.

One of the best demonstrations of the BARI's emphasis on care was during our short visit to Mercedes oldest daughter's home. She lived there with her three daughters under the age of five. The house was surrounded by industrial corn fields. She told us that the lack of glass in their window holes meant that all the sprays used in the field came into their home during application. Her oldest daughter had asthma, but the family could not afford the girl's inhalers. Dr. Valles used some of our group's funds to purchase and send inhalers to the girls. When thinking about how this experience translated into a response from the BARI, it is evident that the inhaler purchase provided a solution to the problem. An element of the ethic of care is decreasing reliance on outside organizations and structures for economic and productive capabilities. Purchasing the inhalers conflicts with that value, even though it solves an urgent health need.

This notion of sensitivity in inquiry would be a repeated theme of the trip, as group members possessed different types of cultural knowledge about the communities we lived and worked in. This varied from one member's commitment to anarchism,

another's job as a human rights advocate, one's participation as a food-system blogger, and another's experience living outside the Latino community. At times, group members seemed to forget about their own privilege with community members. I observed one of the men in the group tell some children at Ojo de Agua Colorado that in the United States he had thousands of dollars. Some group members were more sensitive to others when addressing the issues of the ethic of care in regard to privilege. One of the trip's goals was to encourage reflection on life in the United States compared to life in the rural Mexican countryside. One group member remarked on more than one occasion that he was shocked by how his quality of life in the United States was so dramatically different from people living "in the country next door to us." At times, reflection was tinged with denial of personal privilege. One group member repeatedly argued that farmers were making poor choices in buying seeds or drinking cola from the local tienda. Her reflection never reached a point where she considered educational experiences and cultural norms that would make genetically-modified seeds or cola as desirable purchases if you had money.

### *Challenges to care*

The volunteers on the trip with the Binational Agriculture Relief Initiative had unlimited opportunity to provide feedback, but the channels to communicate feedback were primarily informal. We spoke during meal times primarily, and used this as an opportunity to reflect upon our experiences. As participants experienced fatigue and levels of culture shock, communication processes diminished in efficacy and in frequency. Dr. Valles was the trip leader, but her leadership style is more inspirational

than directive. People work with her because they are motivated to, not because she gives orders. A group power structure was effective early in the trip, but as attitudes began to wane, attempts at directive leadership were too late. Without opportunities for the group to maintain its purpose through communication, some advantages to group participation were lost.

Currently, the ranchos are heavily dependent on outside organization for economic and productive capabilities. A significant challenge to the ethic of care for the Binational Agriculture Relief Initiative is the tendency of the group to provide material aid. The donations of clothing, school supplies, shoes, and toys are needed. At many of the ranchos the gratitude was evident, but there were signs that some community members expected a handout. One boy at a rancho told a group member that his mother told him to ask us for soccer shoes because we brought them from the United States. A few women approached the women in our group to request a number of items we did not have. Creating a system of handouts does little to improve the conditions of the community long-term and is counterintuitive to the ethic of care. Dr. Valles has been on trips to the region so many times that when community members see her, they expect the accompanying supplies. She spoke frankly of her frustration when she felt communities simply desired the goods. Yet, she framed it as well-intentioned and a relic of the time where she did all of the work herself. Bringing goods and talking to farmers was all that was available to her in the early years of the partnership. In many ways, the connections formed over years of aid distribution both challenge and assist the emphasis on care in the BARI's work.

Dr. Valles's passionate commitment to the mission of the BARI inspires loyalty from those working with her, and is evident even in brief conversation. As we travelled throughout Jalisco, residents who met her on previous trips would seek her out to say hello. Some even referred to her as "Santa Ana" for the aid and communication with loved ones that she had provided ranchos over the years. Her experiences are the inspiration for every aspect of the BARI's programming and mission.

The recommendations the BARI is proposing for partnerships and agricultural improvements do much to address elements within the ethic of care. The BARI pursues goals that redistribute and rebuild power structures within these communities. As the BARI moves towards its stated goals of creating collaborative partnerships between farmers, consumers, and the government, the ethic of care is improved. Due to a history of capacity issues, the BARI has not been able to do more than offer relief items, with little opportunity for long-term assistance. Bringing agronomist Daniel Melendez with us to Rancho Nuevo was an appropriate move for the BARI to encourage the ethic of care, providing a trusted agricultural expert that farmers could speak with regarding food production.

### ***Consistency and the Binational Agriculture Relief Initiative***

The ethic of consistency focuses on fair practices and standards in relationships. Consistent communication behaviors reinforce expectations and synchronize program design with stated goals. For consistency to be maintained throughout the process, communication and a commitment to follow-through on promises are important.

For the BARI to develop long-term, sustainable programs, the ethic of consistency aids in establishing the trust that is currently lacking between individuals and their government. The goal of the BARI to improve living conditions in rural Mexico focuses on program that is locally-focused. Improving local communities over time will increase the community's ability to be consistent in supporting its citizens.

The ethic of consistency within the Binational Agriculture Relief Initiative was observed in the relationships of Dr. Sarita Valles to the communities. For over 10 years she has been working in these communities. Fairness and farmworker empowerment are at the core of her work. She maintains contact with Oscar Chávez and Daniel Melendez so that she knows the contextual shifts of the region. This was not the first group trip Dr. Valles has led. On previous trips she brought graduate students to engage in ecological research in addition to farm visits. Before and during the trip, group expectations and goals were communicated repeatedly by Dr. Valles, sometimes ad nauseum in the case of the food concerns.

Continuing to work with agronomist Daniel Melendez is one way the Binational Agriculture Relief Initiative can increase consistency and honor traditional indigenous culture and its thousands of years relationship to corn and corn production. Daniel Melendez has been working to develop growing methods for *maiz criollo* to preserve consistency in agricultural production in Mexico. Communicating that to farmers encourages the adoption of practices that are consistent with Mexican cultural values. Consistency is perhaps the most effective challenge to neoliberal incentives. Global market structures rely on advantages shifting from source to source based on



competition. In a tumultuous market, producers have little security unless they consistently find a way to produce more goods for a cheaper price, diminishing their connection to their local economy. Creating a stable local market, on the other hand, keeps competition shifts local, which keeps the local economy functioning.

### *Challenges to consistency*

The political situation in Mexico and specifically in Jalisco is tenuous at best, and is perhaps the largest factor challenging the consistency of the BARI. The BARI planned another delegation for travel and research on a longer itinerary in summer 2011. Planned volunteer time in the field ranged from three to seven weeks to complete inquiries into ecological conditions, agricultural innovation, and engage in strategic planning. Workshops with Daniel Melendez were planned to train farmers and help increase adoption of *maiz criollo*. The increase in cartel violence in the region and warnings from community members about the risks of program travel influenced the BARI's decision to cancel the trip. Additionally, group members may not be able to afford to travel to Mexico every year with the BARI. The inability to maintain a consistent international volunteer base means that the BARI must expend resources to train new program participants before every trip instead of taking experienced volunteers to the field.

Another challenge that reflects positively on the goodwill of program participants but detracts from achieving consistency is the willingness of group members to make promises to community members regarding return visits. All but two group members confessed during the trip to giving people at ranchos extra money when asked. One

group member told farmers at two different ranchos that he planned to return to their rancho the next day to help with chores and farming activities. Because of group schedules he was unable to return. This is exactly what Bunch (2000) advised against. If those working collaboratively with local communities allow promises to be unfulfilled, trust in the development initiative is diminished. As an element of trust-building, consistency must be regarded as necessary.

### **Reflections on the method**

Through the lens of the critical-rhetorical method, the communication and organizational behavior of the BARI emerged. One rhetorical strength of BARI's work is its emphasis on organizational authority without creating a power structure where local communities are subordinate to the BARI. Dr. Valles emphasized throughout the trip that we all were students with much to learn from community members. At the same time, she presented us to the communities as advocates from the United States that were invested in improving local living conditions.

### ***Invention and BARI***

Invention refers to the strategies of persuasion utilized to generate advocacy. BARI's primary strategy to encourage advocacy was witnessing (Pezzullo, 2007). Participants saw first-hand the realities of *campesino* life in rural Jalisco. Vernacular discourse used by Dr. Valles throughout the trip aided group members in understanding the "whats" and "whys" of many cultural elements that were easily misunderstood.

The critical-rhetorical ethnography requires the ethnographer to exist within the organization's frame of invention. As a rhetorical element, invention provided group

members with an intellectual tool box with which to interpret elements of the trip. Dr. Valles worked for over a decade to establish the BARI's mission and priorities when working in the region. Participants were responsible for maintaining the reputation and mission of the BARI. There was a feeling of group accountability that perpetuated the maintenance of BARI's values and messaging.

Resistant vernacular rhetoric is the construction of discourse within daily talk to challenge power structures. While on the trip we met with many individuals that spoke to their own powerlessness within existing structures. However, many with whom we spoke also articulated what they were individually doing in order to reestablish personal agency. This resistant vernacular rhetoric creates discursive space for challenges to dominant rhetoric through the use of everyday informal speaking. The BARI employed a resistant vernacular rhetoric to challenge concepts of neoliberalism throughout the trip. Group members questioned farmers about their feelings regarding genetically-modified seeds and corporate agriculture. As a rhetorical strategy, this helped connect issues of neoliberal policies to the everyday experiences of farmworkers and strengthened the BARI's advocacy.

### ***Kairos of BARI***

*Kairos*, or timeliness, helped connect issues of urgency to development interventions for group members. When we spoke with families who experienced food shortages, group members identified with the reality of hunger. Group members admitted wanting to buy extra food to take to ranchos to distribute.

When farmers discussed losses in agricultural production over time, the need for interventions that improve living conditions emerged. Seeing farmworker circumstances in person was instrumental for group members to understand realities associated with rural life. Also, participating with local communities in real-time helped participants understand the time commitment of rural agriculture. At many locations we visited water sources that were 10-35 minute walks from rancho homes. Group members commented that walking that far for water at least once a day increased hardship for farmers. This motivated group members to brainstorm alternatives to water-carrying. While few solutions emerged from that brainstorming session, the experience of thinking within local time constraints was beneficial in connecting group members to engaged advocacy.

***Phronesis and BARI group participants***

Phronesis is “the wisdom gained through the practice of advocacy” (Hess, 2011, p. 146). As a critical-rhetorical ethnographer, phronesis incorporates strategies that build advocacy with regard to contextual factors. Group members spoke often about how they would never be able to look at their lives the same way after the trip.

BARI’s mission on this trip was to educate group members to become advocates for *campesino* populations in rural Mexico. While culture shock negatively influenced aspects of the trip for many participants, by the end of our trip, group members demonstrated the desire to discuss the importance of farmworker advocacy with those in the United States. One group member published accounts of her trip on her blog. Another continued working with the BARI after returning to California and was chosen to be on BARI’s board of directors. Every member of the group expressed interest in

continuing to support the mission of the BARI, demonstrating the evolution from experience to phronesis. Even if group members do not work with the BARI on future endeavors, Dr. Valles was optimistic that the experience would contribute to their personal advocacy. For her, one more voice speaking for farmworkers is an improvement in the status quo and an expansion of the BARI's mission.

### **Reflections on the 7Cs ethical model of communication and the Binational Agriculture Relief Initiative**

The goal of using the 7Cs ethical model of communication to analyze the BARI was to offer insight into program strengths and weaknesses while examining how the BARI turns lived experience into advocacy. As an analytical frame, the 7Cs ethical model of communication was beneficial for analyzing the BARI due to its emphasis on participatory structures when working in indigenous communities. Elements of personal advocacy found within the critical-rhetorical ethnographic model aided me in uncovering and identifying the seven constructs over the course of the trip. Based on my personal experiences, I could evaluate if the BARI's methods of informing participants and encouraging local partnerships were appropriately structured and delivered.

The 7Cs model was effective to evaluate the work of the BARI in Jalisco. As guiding principles, all seven constructs were helpful in illuminating strengths and areas of improvement for the BARI. Collaboration was one of the strongest elements for the BARI, as collaboration between group members was vital for program success. Through these collaborations, reflective knowledge sharing enabled strengthening of group member advocacy that builds a stronger foundation for the BARI's work in Mexico.

Local collaborations were also vital to the BARI's mission. Past experiences with community members have built a foundation for the BARI to strengthen partnerships over time. Cultural elements of the BARI's work strong as all behaviors and expectations were based around guiding principles of culture. Emphasizing the growth of *maiz criollo* helps the BARI reinforce the ethics of conservation and culture, while supporting future opportunities for community members to collaborate with agronomist Daniel Melendez.

The 7Cs model, when used diagnostically, aided in uncovering organizational issues within the BARI. Concerns about the BARI donations creating problems in the long-term were explained in the analysis of the ethic of care. Although the donation distribution is one of the characteristics of every trip Dr. Valles has made to rural Mexico, over time it has created community expectations that the BARI cannot always meet if the desired items are not donated. Dr. Valles is working to insure that future collaborations are less aid oriented and designed to strengthen long-term work partnerships. Critically examining these elements constructed a full representation of the work behind the BARI's mission.

Through conversations about the BARI's work, Dr. Valles and I had opportunities to discuss capacity issues of the BARI. When we discussed some of the challenges, she explained it to me by discussing how it had been her mission for years, and she had encountered so many challenges that she was fine to do the bulk of the work herself and hope that was good enough. She expressed a common sentiment of nonprofit founders, that this work has been hers since day one, and she will continue to do it with

or without help (Block, 2004; Block & Rosenberg, 2002). This conversation presented some interesting conflicts to me regarding future capacity issues the BARI may experience. Primarily, it highlighted the existence of Founder's Syndrome in the organization. Founder's Syndrome is a typical challenge facing nonprofit organizations (Block, 2004; Block & Rosenberg, 2002). Organizations of all types begin as ideas in the minds and hearts of single founders or groups of people. Over time, those ideas incubate into projects, and may take years before becoming institutionalized as functioning groups. Founders of nonprofits utilize entrepreneurial skills to imagine a more effective process, improved services, and a better world.

Many nonprofit organizations are started by passionate individuals who are committed to a vision that requires the commitments of others to succeed. However, due to the level of personal involvement, founders are often hesitant to hand over aspects of their organization to others when organizational size increases or direction changes (Block & Rosenberg, 2002). This can be detrimental to the organization in some cases, but is an understandable human limitation. Dr. Valles mentioned to me that she had no idea who else would do this work if she stopped, and that she struggled to hand over elements of organizational control to others. While nonprofit organizations depend on the initiator's savvy, once the organization is up and running, the role of the originator must evolve along with the organization. Unintentionally, this creates a controlling position of power, instead of distributing decision-making power among a number of individuals. For Dr. Valles, her passionate commitment to the work may diminish the BARI's capacity long-term unless she is able to expand the support structure of the BARI through delegation of

power. As the BARI develops as an organization, it will be important for stakeholders, especially the board of directors, to discuss opportunities for redistribution of power roles within the BARI. Ideally, Dr. Valles's vision for the BARI can be maintained while its capacity expands through the delegation of leadership.

For the ethic of culture, I uncovered some issues the BARI had when dealing with participant culture shock. Since there were only informal opportunities for group members to decompress about their days, it would be helpful for there to be more structured discussions about individual experiences with culture shock. Participants needed more guidance in dealing with personal responses to some of the reality we witnessed. The emotional labor of working in development communities does result in the "analysis paralysis" that one group member described. Managing culture shock is one area of improvement where trip pre-planning could be of assistance. While the information presented helped group members understand the economic and social contexts of the BARI's work, I feel that many group members were unprepared for their feelings when witnessing the human aspects of the trip.

To improve community ethos, the work the BARI does will need to eventually move from exposure advocacy to participatory advocacy. The experience with the scorpion sting is a good example, as one participant's reflection only considered her experience, not the different experience of the community in which she was working. Building an ethic of community is difficult, but is improved through collaboration and an emphasis on equality and participation. BARI members need to see the communities they work with in Mexico as extensions of their home communities, due to the economic



and social ties. Creating these links is necessary to aid participants in conceptualizing issues without borders in the age of neoliberalization. As neoliberal innovations dissolve borders, the understanding of community size and scope must encompass a view which accounts for these new contexts. The BARI attempts to account for these factors while prioritizing ways to emphasize community connections through collaborative partnerships, but cultural constraints affected participant ability to develop those connections into phronesis.

Another way the BARI can aid in building community ethos is to work toward advocacy that builds community with the government as a partner with the citizens, instead of a top-down mechanism. While many government policies and procedures will continue to function in a top-down manner, especially in the way services are administered, seeing government as only one aspect of a community instead of a controlling body has significant rhetorical value. Advocacy organizations that seek to create partnerships in the field cannot discursively reinforce government structures of control. Helping to expose the community to a variety of leadership structures helps empower community members to seize their personal agency and take steps to create more efficient and productive community partnerships that focus on trust and equality.

From this case study, members of the BARI board of directors can examine how rhetorical discourses operated in educating group members and creating collaborations with community members. For the BARI, the interplay of the constructs generates direction in designing program improvements. This analysis demonstrated that the BARI's program design incorporates all the aspects of the 7Cs model, but relies upon

group members to fulfill its purpose. Improved training for participants before the trip would clarify expectations for the trip and avoid some of the elements of poverty tourism that Dr. Valles spoke about wanting to avoid.

Organizations improving international agriculture can rely on these ethical constructs to evaluate future program decisions. While in Jalisco, group members often brainstormed about future projects for the BARI. Revisiting those plans with the 7Cs ethical model of communication in mind can aid in selecting the appropriate partnership and project for developing the BARI's future endeavors.

### **Personal reflections on the use of the critical-rhetorical ethnography**

As a method, the critical-rhetorical ethnography was appropriate for this analysis due to my personal commitment in the mission of the Binational Agriculture Relief Initiative. Studying advocacy is a task that may not be as effective unless researcher objectivity is suspended. A participant scholar may not fully understand and be able explain what an organization does if she merely observes what is happening. Human interaction contains so many elements of in-group/out-group negotiation that remaining in the outgroup by choice may sacrifice the discovery in integral elements of the organization.

A methodology that accounts for bias and incorporates advocacy is challenging at times. The different and shifting levels of experience and commitment from other group members presented challenges, as I kept reminding myself I was not only on the trip to observe but also to guide. At times, I was frustrated because I felt I was expending too much personal energy educating my peers about the expectations of our trip instead

of working with farmers and local contacts to develop future collaborations. Personally, I was aggravated by the stop at the shoe factory. My peers' enthusiasm for observing violations of worker treatment made me feel uneasy, as if they were objectifying the experience for a juicier story to take back to the United States. This work grants me permission into the lives of others who exist in some of the world's most vulnerable circumstances. I cannot perceive suffering enthusiastically, and am wary of anyone I have met in this work that does. The disappointment of some group members that the factory was not a bigger "bust" inspired me to rethink how we conceptualize and talk about the conditions we observe. After returning, one group member and I discussed the factory incident, and how to get people to respond to food shortages and environmental crises with the same fervor. If only agriculture were as turmoil-sexy as a sweatshop. I realized if I were on a sweatshop tour of Mexico, I would be the group member running out of the van to look at cornfields.

At times the self-reflexive aspects of the critical-rhetorical ethnography helped to manage my relationships with group members who expressed disappointment with some of our meetings. One group member was not happy after our meeting with the microlending association because she found their work "disappointing." When I asked her to explain further, she told me that she had read a book by Mohammed Yunis, founder of the Grameen Bank which is famous for the success of its microlending model in the developing world. In the book there are a number of success stories about women receiving microloans that helped to open small businesses and generate personal income. She said she did not understand why the local group did not have similar success stories.

Her disappointment extended to the microlending practices that prioritized agricultural endeavors such as crops and livestock over small business development. She wanted the microlending organization to have greater control over what recipients did with the money. She questioned the ethical aspects of providing other support and training for farmers who purchase genetically-modified seeds and wanted loans to only fund production of *maiz criollo*.

My experience at the same meeting was almost completely the opposite. I was thrilled to hear that the association had an equal distribution of loans between women and men. They had a built-in strategy to assure program viability in the case of crop failure or farmer fraud. Farmer interest rates for the loans were high due to the microlending association receiving money for the loans on loan from the federal government. They told us about the failure rate of microlending cooperatives, explaining that their priorities for operation were keeping the business afloat. Within existing circumstances, I felt the microlending association was navigating effectively by prioritizing long-term organizational sustainability. To hear my companion describe what I thought were successes as disappointments was eye opening. My initial response was to try and go into the array of barriers to the success of any microlending endeavor and discuss some of the consequential problems that arose from the Grameen Bank. Instead, we had a discussion about the context of the microlending association in greater detail. We discussed the realities in which the organization operated, and how their motivations were not tied to a specific path to development as ours were. Instead, their

priority was to make sure farmers had opportunities to make the improvements they wanted.

The self-reflexive nature of the critical rhetorical ethnographic method aided me when considering my perceptions of others behaviors. As I identified what I thought was helpful or unfocused behavior in others, I was better equipped to consider that behavior's role in fulfilling the BARI's mission. I was then able to create ways for the BARI to respond to both types of behavior in a constructive manner. After a few days visiting ranchos, two group members began complaining about conditions regularly. Their behavior caused some strain within the group, which we attempted to diffuse in a number of informal conversations. This practice is similar to those found in offices throughout the world. It was difficult at first to conceptualize our organizational space as wherever two people in the group were, but helpful in resolving interpersonal stress. I think many individuals working in fields that promote participation, work with volunteers, and address complex environmental issues deal with these types of interpersonal conflicts. Different levels of interest and motivations for participation are common, yet need to be harnessed in order build cohesive programs.

## CHAPTER VI

### CONCLUSIONS: THE 7CS MODEL OF ETHICAL COMMUNICATION IN PRACTICE AND POLICY

Through all these new, imaginative, and creative approaches to the problem of sharing our earth with other creatures there runs a constant theme, the awareness that we are dealing with life—with living populations and all their pressures and counterpressures, their surges and recessions. Only by taking account of such life forces and by cautiously seeking to guide them into channels favorable to ourselves can we hope to achieve a reasonable accommodation between the insect hordes and ourselves. (Carson, 1962, p. 196)

The constructs of the 7Cs ethical model of communication include: collaboration, culture, community, conservation, capacity, care, consistency emanate from the disciplines of environmental communication and indigenous knowledge management. All seven were derived from examining the literature of both fields to determine areas of emphasis that can evaluate scope and effectiveness in a community-based intervention with regard to local human and natural resources. The previous case study with the BARI demonstrates the model's applicability for advocacy and nonprofit organizations. I examined the BARI's communication strategies and program design for all seven constructs in the model to better understand how the BARI turns experience into

advocacy. The 7Cs ethical model of communication can be used to analytically parse out elements within existing development programs. As a diagnostic tool, it guided my analysis of content and participant behavior. As a planning tool, it influenced my ability to participate in the BARI's mission. The model's foundations in environmental communication and indigenous knowledge management are appropriately broad for variety of levels of engagement including communities, governments, and community organizations. Using the 7Cs ethical model of communication can help programs working with a variety of populations coordinate within and respond to economic, political, and social contexts.

This chapter addresses further considerations for the 7Cs ethical model of communication. Beginning with a discussion of aspects of the model that may need further refinement, I next discuss other research methodologies that could use the 7Cs model within research design. Next, I consider other fields that could use the 7Cs model including natural resource policy and corporate social responsibility studies. Finally, I discuss the 7Cs model as a response to globalization ideology in the neoliberal era.

### **The 7Cs ethical model of communication: Reflections on theory development**

Each of the seven constructs within the model is designed to be easily understood by development practitioners, and the content of the constructs is determined by the local population. Instead of personal categories applied to local individuals based on willingness to change (Rogers, 2003), the 7Cs are categories that can only be defined by local circumstance. Further, due to the collaborative and cultural components, knowledge content within the model is designed to be shared with local communities as

part of the development intervention. Communities that utilize elements of the 7Cs model can benefit from incorporating the model's ethical considerations into their own planning and development. This model helps organizations create collaborative knowledge with local communities while also having local communities collaborate to improve the model. There may be issues with translating the ethics to local populations, due to varying cultural values and existing accountability structures may translate into conflicts between the ethics. However, the model attempts to account for this with its breadth of considerations and foundations in cultural values.

As an analytical tool, the 7Cs ethical model of communication can be considered a 'glocalizing' methodology that thinks globally and acts locally while maintaining cultural flexibility (Gobo, 2011). The glocal perspective accounts for the consequences of globalization such as migration, policy shifts, and changes in value structures. The glocal requires new methodologies and perspectives for inquiry that are not rooted in formalized communication structures. S. N. Smith, Fisher, and Heath (2011) critiqued the formation of a global methodological value system based on survey research methods, despite conflicts when serving poor communities, communities with low literacy rates, highly intelligent populations, and non-Western cultures (Gobo, 2011).

For NGOs collaborating in international contexts, the 7Cs ethical model of communication outlines strategies to coordinate knowledge between disparate groups within a local context. Organizations serving communities co-create structures for and with community members. Bhatt (2001) explains that organizations need to provide opportunity for members to coordinate interactions meaningfully. Success does not only



require creating technological solutions to problems, but considering the implications for cultural and social subsystems. One strategy proposed by Allee (1997) is to create core competency arrangements, in which expert members from different stakeholder groups work together to address a particular knowledge domain. Taking time in the planning stages to construct competencies within the seven ethics of the model would increase collaborative potential of the projects.

The 7Cs ethical model of communication, when applied appropriately, creates a participatory community model. Similar to the advantages and behaviors of a Community of Practice, groups using the 7Cs model can continue developing practices and knowledge management strategies over time (Iverson & McPhee, 2002, 2008; Wenger, 1998, 2004). Value generation that is situated locally strengthens the community's ability to further innovate and expand the use of the 7Cs ethical model of communication.

Perhaps the most promising use of the 7Cs ethical model of communication is its potential application as an evaluation model and method. Programs adopting the model as a framework for evaluation are afforded appropriate breadth and emphasis on a number of factors contributing to program success. Methods for evaluation could include observation, interaction, interviews, and participation with program offerings.

### **Quantitative analysis and the 7Cs ethical model of communication**

Although designed and utilized in this qualitative study, the 7Cs ethical model of communication would be an appropriate evaluation tool in quantitative analysis. The seven constructs are broad enough to account for perspectives within a large population,

and are easily translated into survey constructs and other analytical frames. Quantitative analysis using the 7Cs model is appropriate in assessment studies with large populations, such as inquiries into technological appropriateness of an agricultural intervention for an entire country. Constructs were designed to be expansive in quantitative studies in order to account for a variety of interpretations in large populations.

### **Using the 7Cs model in natural resource policy contexts**

Theory addressing human-resource dynamics in conflict scenarios should address a broad array of material goods, individual norms and decision making, the importance of group characteristics, opportunities for the use of reciprocity and trust-building, and local rules (Cardenas & Ostrum, 2004). The 7Cs ethical model of communication can be a tool for exploring decision-making contexts in other natural resource settings. The ethics of collaboration and care encourage reciprocity and exchange between participants, which improves the value of social interaction. Cardenas and Ostrum (2004) found that reciprocity motives are a product of repetition in decision-making scenarios, and can strengthen relationships long-term. Hardin was correct when he theorized that a lack of trust, reciprocity, communication, and rules would lead to resource exploitation. The 7Cs model's emphasis on trust and relationship-building prevents resource exploitation by honoring capacity, conservation, and care.

In their work reflecting on the current theoretical foundations of commons resource use, Basurto and Ostrum (2009) explained the analytical and policy traps associated with commons logic. One trap is creating or recommending any form of panacea. Another is asserting the uniqueness of a case, as there are elements of every

case that can be considered universally for theory-building. The 7Cs ethical model of communication avoids this by rejecting the “one-size fits all” approach and utilizing foundational principles from a number of fields to create broad definitions of constructs.

Cardenas and Ostrum (2004) described a set of information layers that decision makers for the commons use, ranging from material incentives, contextual dynamics, and group and individual characteristics. Knowledge management is a crucial function of organizations working with decision-makers. This perspective is similar to how the 7Cs ethical model of communication uses indigenous knowledge to define cultural values. This affirms the possibility that the 7Cs ethical model of communication has applicability for decision-making in natural resource policy settings. The coordination of knowledge throughout the model’s seven constructs formulates the context of the program for both participants and organizations. Cardenas and Ostrum (2004) explained that an understanding of the multiple levels of incentive and interaction aids in understanding how to address resource conflicts in environmental contexts.

### **The 7Cs ethical model of communication in the neoliberal era**

Realism in comprehending reality includes both reading history (in particular, past efforts at transforming the world) and reading the impact of past history on the social psychology of both popular forces in general and activist cadres. We have lived through at least two hundred years of attempts to transform the world—either via what are called “revolutions” or via attempts to use the ballot box to vote oneself into power in the states and thereby legislate transformation. One cannot say that overall

either of these strategies has been very successful. (Wallerstein, 2008, p. 54)

I propose the 7Cs of ethical communication not just as a guide for international agricultural program development and evaluation, but as a professional ethos deserving of more discussion for all working to promote change in globalized contexts. The 7Cs ethical model of communication is a discursive response to the challenges of the neoliberal era. Creating an ethos that is culturally-located within the partner communities helps organizations develop *in situ* knowledge. Further, the 7Cs model addresses the issues of place-based localization, as articulated by Escobar (2001). He explained that place-based struggles might offer alternatives to the effects of globalization on community boundaries. Expanding organizational ethos from establishing professional legitimacy (Kothari, 2005) to a creating participatory legitimacy in partnerships with local communities (Bunch, 2000) offers a stronger foundation for responsive action to neoliberal regimes.

Globalization creates networks of dependence that connect disparate and distant societies through economic structures. On every continent, populations are migrating for cultural, economic and political reasons. Neoliberal trade agreements create economic incentives that trigger mass movements of populations (United States Joint Forces Command, 2008). Neoliberal agricultural protections within trade agreements privilege production in larger economies and force small-scale farmers to compete with industrial production on the world market (Frank, 2004). Developing countries receive subsidized

exports from developed countries that alter the balance of national market values and make it difficult for farmers to compete (Frank, 2004).

The world is fraught with humanitarian crises. The ravages of natural disasters and the globalized consequences of environmental shifts, political wars, social stigmas, and economic collapse affect the world's citizens. Many consequences of globalization are symptomatic of structural change; yet organizations wishing to improve global living conditions struggle to address the consequences. Not to be confused with global trade, where economic goods are exchanged, globalization not only markets economic goods, but modes of cultural production and cultural value systems based on the idea that rational actors respond to economic incentives. Professionals attempting to respond to globalization's consequences are met with hurdle after hurdle: funding issues, safety concerns, corruption, lack of opportunity, capitalist impulses, and loss of local culture. The role of professionals working to address crises of role is not to "save" local communities, but to support their growth and development (Bunch, 2000).

Lucero (2008) offered considerations for development possibilities in times of multicultural liberalism by first highlighting the organizational capacity of indigenous communities, particularly the use of norms and solidarity practices as a way to overcome collective-action challenges. He highlighted the historical evidence that indigenous protest mechanisms do not increase or inspire anti-indigenous feelings, but instead empower the community. "Indigenous people, who were often prisoners of neocolonial social hierarchies, were often forced to occupy (literally) subordinate spaces at the back of buses and marginal spaces of cities and towns" (p.158). As opportunities for peasant

organization increased, rural communities were able to participate in modernizing while maintaining indigenous identities and traditions (Lucero, 2008, p. 141). NGOs and workers aided indigenous people in their struggles, yet remained in supporting roles, honoring the indigenous ownership of the movement. Lucero (2008) explained, “The organizational capacity of indigenous communities is an important background explanatory variable as the norms and practices of solidarity and trust overcome collective-action problems” (p. 141).

The emergence of indigenous populations as a subject of international law and policy focuses on collective human rights. One hundred years ago, indigenous populations were considered to be doomed or dying out during periods of modernization and state expansion in international relations (Colchester, 2002). Indigenous communities around the globe struggle to function within culturally appropriate frames, continue traditional practices, and maintain social autonomy (Holt-Gimenez, 2006; Lopez, 2007). Rural populations are dependent on industrialized systems for their well-being based on systems of food dependency (Doughty, 1991).

Appropriate agricultural interventions are sustainable in relation to community human, economic, and natural resources (Bunch, 2000; Holt-Gimenez, 2006). Such endeavors hinge upon the organization’s ability to establish presence and build trust in the community, ultimately aiding the community in self-governance. Not only must current development initiatives emphasize areas in which to expand opportunities for indigenous communities both politically and economically, but development also must emphasize sustainable and culturally-relevant means for capacity building. These

emphases are helpful in creating development strategies that respond to neoliberalism while creating culturally-relevant relationships and sustainable partnerships.

As a new model, the 7Cs model speaks to the issues addressing the credibility of United States organizations worldwide. As the world's largest exporter of agricultural aid to developing nations in the form of technology, extension education, and agricultural market expansion, United States agencies working internationally must confront their controversial histories. Many United States aid and development organizations have histories of working in developing rural communities under the auspices of aid, but working ultimately against community goals. In Guatemala, United States aid intervention supported the scorched earth policies of Romeo Luis Garcia and Efraim Rios Montt which resulted in the destruction of 400 indigenous villages and the murder of over 200,000 indigenous Maya between 1981-1983 (Grandin, 2004; Montejo, 1997). Restoring trust and increasing the accountability of international development initiatives should be a goal of every program.

The 7Cs ethical model of communication in the neoliberal era can serve as a tool to rebuild trust with local populations. For organizations working in international contexts, lack of trust translates into need to improve accountability within the ethics of care and consistency. If organizations and individuals work to hold themselves accountable to fulfill promises they make, then trust can be rebuilt through collaborative partnerships (Bunch, 2000; Thieshusen, 1995). Rhetorical thoughtfulness and thoroughness are an appropriate foundation for initiatives that build trust with local populations. No matter the country with which one works, there are always myriad

solutions on the table for every problem. Just as building a fence between the United States and Mexico solves none of the problems associated with human migration in a globalized economy, “simple” solutions are often hydra-like in their ability to spawn new problems. Building an agricultural value chain may have structural economic values in theory, but may not play to the strengths of the local population and generate appropriate social capital for the local community. Professionals working in all forms of international development must focus on the ability to synthesize knowledge on a variety of levels in order to better serve developing communities.

The necessity of care as it relates to issues of trust and reciprocity illustrate how personal relationships can influence the participation and ultimately the success or failure of a program, an advantage the 7Cs offers. Local culture, knowledge, and networks contribute in innumerable ways to the development of local institutions. Relationships between local-regional-national policies and government organizations also influence the success or failure of a specific development program. Schafft and Brown (2000) explained, “Locales characterized by a combination of embeddedness and autonomous ties will have the greatest prospects for achieving developmental outcomes, including economic advancement, increased civic participation and institutional democratization” (p. 204).

As populations around the world respond to neoliberal contexts and issues of globalization new perspectives need to embrace myriad circumstances. The 7Cs ethical model of communication responds to these circumstances by valuing local cultures through equitable collaborations with government and outside organizations. Through an



analysis of potential uses for the 7Cs ethical model of communication, the opportunities to expand this foundation emerge. The range of applications for organizations and individuals in a variety of settings presents an optimistic outlook for the future of this model.

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