

SOWING SUSTAINABILITY:

Rice commodity pathways, NGOs, and farmers' engagement
with alternative agriculture in northeastern Thailand

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Abstract

Rice is the cornerstone for much of Thailand's agricultural development, but moving from subsistence farming to commercial agriculture has greatly altered its role in the country's northeast region. Particularly, the Green Revolution impacted farmers' livelihoods, environment, health, and culture. In response, grassroots non-governmental organizations (NGOs) emerged to provide an alternative to the newly modernized agricultural system. The impact of these NGOs is considered through research in six communities across the Northeast, where I analyze both the various pathways of the rice commodity system and the effects of organizational involvement on alternative agricultural practices and values of farmers. I find that farmers in non-governmental organizations express a greater degree of engagement with alternative farming practices, value of native rice varieties, and practice of agricultural customs. However, I also find that farmers are primarily focused on markets, indicating the role of market pressure and practicality in their decision-making. I discuss these findings through the lenses of development frameworks, as well as non-governmental and social movement literature. In doing so, I conclude that these alternative organizations are effective due to their successful recognition of the practical, short-term priorities of farmers on balance with long term goals of environmental and cultural resilience. Moreover, that these groups are unique in their organization, such they blend elements of both NGOs and social movements to create a hybrid network. I recommend that practitioners and researchers looking to sustain themselves in the region recognize the unique features of these networks, and ultimately propose future research plans that would aid in furthering the understanding of northeast Thailand's alternative agriculture movement.

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Table of Contents

Abstract	2
Acknowledgements	3
Introduction	5
Chapter 1: Literature Review	9
Food Security	9
Development frameworks	13
Alternative Agriculture	19
Non-governmental organizations and social movements	23
Chapter 2: The Dynamics of Thailand	35
Population dynamics and social context	35
Economic development and policies	36
Political environment	39
Rice and traditional culture	42
Chapter 3: Development of conventional and alternative agriculture	47
Conventional agriculture and governmental policies	47
Alternative agriculture and non-governmental organizations	52
Rice commodity pathways	55
Chapter 4: Methods and Results Discussion	61
Methods	61
NGO efficacy	63
Motivators and development frameworks	66
NGO and social movement platform	72
NGO-government involvement and unaffiliated farmers	78
Conclusion	83
Recommendations for future research	83
Additional factors of interest	85
References	89
Appendix A	94
Appendix B	96

Sowing Sustainability: Rice commodity pathways, NGOs, and farmers' engagement
with alternative agriculture in northeastern Thailand

I woke up to the sound of morning glory frying as my host mother, Pikoong Phanloed, cooked up breakfast before starting her morning chores on the farm. I was on one of my first home stays during my fall 2011 semester in northeastern Thailand, living with a family involved in the Alternative Agriculture Network (AAN) – a non-governmental organization that promotes sustainable agriculture. The sun was beginning to peak through the cracks of the wooden house, illuminating some of the dusty posters on the wall. Most of these were of the royal family – par for the course in any Thai household – but there was another that stood out. It depicted farmers, sweating and tired, digging up money from the earth in front of an industrial skyline, and in the corner of the poster were the letters WTO (World Trade Organization) crossed out by a bold red line.

I was in Thailand to study human rights as they relate to liberal development policies and environmental degradation, focusing particularly on non-governmental organizations and their efforts to combat these issues. During that first home stay, I had only just been introduced to the AAN, and the concept of NGOs for sustainable agriculture, so my understanding was still developing. At that point, I had been engaging with activists and NGO leaders who explained how the government's agricultural policies and exploitative bilateral free-trade agreements had prompted their network of farmers to seek alternative. Hyped up on these issues of environmental human rights and international political economy, I assumed that my host mother had that poster as an indication of her strong organic advocacy and fiery political drive. But when I asked her about it, she just laughed and explained that it was a gift from her sister – she didn't know what the picture represented, or what the World Trade Organization was. She

simply stated, “It looks nice, that’s all” (P. Phanloed, personal communication, September 21, 2011). And so despite the strong political messages I had heard from the AAN representatives, my host mother – an average farmer involved in the NGO – had a strikingly political poster for no other reason than its aesthetic value. Still working through issues of Thai politics, global trade, and non-governmental organizations, I was surprised by my host-mother’s answer. How is it that a member of an organization with such politically charged leaders seems to have so little understanding or care of these issues in which she’s involved?

Throughout my five months there, misinterpreting that poster wasn’t the last of my confusions in experiencing rural Thailand as I tried to grasp the collision of tradition and modernity. Houses with missing walls and rickety constructed floors had impressive televisions and karaoke machines, and monks’ ordinations – a distinguished and spiritual event – were celebrated with neon lights and flashy dancers. The most common offering to Buddhist spirit houses and shrines was a bottle of Fanta soda, and farmers harvesting rice with a scythe would pause to answer their cell phones. I admit, naively, that I expected more tradition, and instead felt a disconnect between the social and cultural advocacy I had read about and the move towards homogeneity and modernity that I was seeing.

However, it was the complexity of these experiences and the surprising inaccuracies of my expectations, in combination with my studies of biology and political science, that fueled my research interest in the subject of Thai agricultural politics, alternative agriculture and agrobiodiversity, and non-governmental networks. The experiences during my semester abroad exposed me to bigger picture issues related to these topics, and introduced me to the networks of farmers responsible for the local movement. After returning back the United States I realized that my understanding of the topics still had major gaps, leading me to formulate a number of

questions. What role does the government play in shaping conventional agriculture and how do NGOs provide an alternative? What motivates farmers to get involved in these organizations and to what degree do they share the values and goals put forth by the NGO? How do these groups approach maintenance of traditional agriculture and rural livelihoods in the face of neoliberal development? These questions framed my research venture during the summer of 2012, as I had the opportunity to return to Thailand to revisit agricultural communities and take a more systematic look at the farmers involved in governmental and non-governmental organizations.

I frame my research in four key conversations: the debate on global food security and agro-biodiversity; the differences between the alternative agriculture movements in the global north and south; approaches to neoliberal development on balance with the maintenance of native culture; and the role of NGOs as they interact with social movements. Considering food security is an issue of global importance, as the sustainability of the food production impacts the entire world's population. Moreover, focusing on the producer perspective of alternative agriculture in the global south is critical to understanding the movement holistically, as well as ensuring an equitable relationship between production and consumption on the local and global scale. Within development frameworks, Thailand's NGO network serves as a contemporary model of locally empowered groups finding a middle ground to ensure economic security for farmers while educating about cultural and environmental values. Lastly, considering this network as it fits within the intersection of NGOs and social movements provides a novel analysis on the relationship between these groups in contemporary civil society, particularly a newly industrialized country (NIC). I use my Thai case study to synthesize and find a middle ground between the conflicts within these frameworks, and ultimately offer tentative recommendations for non-governmental organizations that find themselves facing friction

between modernity and tradition, agricultural development and agrobiodiversity maintenance, and grassroots membership and semi-elite leaders.

Chapter 1 reviews literature concerning debates of food security and alternative agriculture, three development frameworks in which to consider the conventional food system in terms of social dynamics and farmer welfare, the different perspectives of the alternative agriculture movement between the consumer and producer, and the role of non-governmental organizations and social movements in the global south. Chapter 2 outlines Thailand's social, economic, political and cultural dynamics, with a particular focus on rice and the northeastern region. In Chapter 3 I then discuss the country's transition from subsistence to conventional agriculture, the emergence of alternative agriculture through non-governmental movements, and the various options farmers have in these two commodity pathways. I move to explaining my research methods in Chapter 4, and discuss the results in the context of NGO efficacy, farmer motivation, NGO and social movement platforms, and outlying groups before concluding with remarks on future research considerations

Chapter 1: Literature Review

The frames through which I am approaching my research – environmentalism, political economy, and social change – give way to a number of debates: global food security, theories of development as they relate to neoliberal agendas, and the roles of NGOs and social movements in civil society. So to introduce my study on the alternative agriculture movement in northeastern Thailand, I first discuss important scholarly debates within each one of these frameworks. I begin by reviewing global issues of agriculture in terms of food security and then present three different development theories to consider the possible positions taken by farmers, NGOs, and governments. Next, I present three development frameworks by which alternative agriculture can be discussed, and then review the alternative agriculture movement to distinguish between the movement between the global north and south. Focusing in on alternative agriculture in the global south, I lastly consider the nature of non-governmental organizations and social movements in developing and newly industrialized countries in order to understand the benefits and criticisms of these groups as actors in the public sector.

Food security

The issues surrounding global and local food systems are numerous and diverse, including climate change, loss of biodiversity, farmers' rights, trade agreements, varying domestic subsidies, biotechnological innovation, and food shortage. These debates involve scholars in disciplines from sociology and political science to economics and biology, making the arguments complex and the decision-making process tedious. Moreover, agricultural decisions have considerable economic significance, as the parties involved are often multinational corporations invested in agrochemicals and seeds such as Bayer, Monsanto, Syngenta and Dupont (Pesticide Action Network, 2012). While matters of the global food system

are multidisciplinary and far-reaching, I have chosen to narrow the discussion to the context of food security. Food security debates are about how to best feed the world's population, and this section reviews arguments for and against sustainable agriculture as a means to do so.

The Food and Agriculture Organization of the United Nations defines food security as the “access to safe and nutritious food” (1996). While the goal of food access seems straightforward in assuring the human right to be free from hunger, there are two positions to consider as a means of achieving food security. The first declares that we should continue along the path of improving agricultural technologies so as to increase production on less land, while the other argues that we must make holistic changes to the global food system, considering factors such as equality and democracy, while challenging current agricultural trade policies and Green Revolution methods of farming that reign supreme (Chappell & LaValle, 2011). In terms of agrobiodiversity, the position calling for improved technologies considers biodiversity to be contradictory to food security efforts, as their methods favor mono-cropping for the highest output and simplified mechanized harvest (Avery, 2007; Emsley, 2001; Fresco, 2003). In the opposing arguments, agrobiodiversity is seen as complementary to improving food security, as the return to smaller, more diversified farms is considered the most efficient and sustainable use of land (Badgley et al., 2007; Kirner & Kratochvil, 2006; Tipraqsa, Craswell, Noble, & Schmidt-Vogt, 2007; Oukpaew, 2011; Amnard et al., 1996).

A number of studies have taken up the question of whether mono-cropping or small, diversified farms produce higher yields, ultimately leaving no decisive conclusion. Some studies of organic and integrated farms find that this model is just as efficient as conventional agriculture in terms of yield, and perhaps even more efficient in terms of ecological sustainability (Badgley et al., 2007; Kirner & Kratochvil, 2006; Tiprasqu et al., 2007; Oukpaew, 2011; Amnard et al.,

1996). Comprehensive studies have compared organic to conventional yields on a global level and considered these outputs in the context of population, land-use, and natural nitrogen fixation (available legumes) to conclude that organic agriculture could sustain the world's population (Badgley et al., 2007). Beyond feeding the world, benefits of sustainable agriculture include greater contribution to the regional economy, higher land productivity, higher organic matter concentration (indicating land quality), and greater resilience to pests and disease (Kirner & Kratochvil, 2006; Tiprasqu et al., 2007; Oukpaew, 2011). Furthermore, arguments against conventional agriculture include studies where increased fertilizer inputs have shown to decrease the quality of crops such as rice, making them inferior to organic products (Amnard et al., 1996). Altogether, arguments for diversified agriculture insist that this model strengthens the agro-ecological environment, improving crop productivity and resilience of the system, which serves as the better model for achieving global food security.

Research concerning the efficiency of the conventional agricultural system, however, adamantly insists on the inability of organic and integrated agriculture to meet the world's food needs, and instead supports the potential for improvements with regard to agrochemicals, biotechnology, and mechanization (Avery, 2007; Emsley, 2001; Fresco, 2003). The findings in this field argue that small and diversified agriculture cannot maintain high yields, are unable to operate at an economically efficient level, and demand an unreasonably high degree of management skills (Chappell & LaValle, 2011). Avery (2007) directly confronts studies in Badgley et al. (2007), claiming falsification of data such that conventional yields were counted as organic. Furthermore, those in favor of conventional agriculture believe that biotechnology is not only the answer to hunger, but also see its potential to improve world health conditions. Biotechnological food innovations include "iron-fortified rice; hepatitis B vaccine in bananas;

vegetables fortified with compounds that lower ‘bad’ cholesterol... transgenic animals producing therapeutic quantities of human proteins in cows’ milk; or promising transgenic animal vaccines against some tick-borne diseases or swine fever” (Fresco, 2003, p. 2-3), which solve issues of food security and more.

On an order of principle, these two parties tend to speak to one another across scholarly literature and media campaigns. For instance, the Avery (2007) and Badgley et al. (2007) studies noted above directly confront one another in a debate over the productivity of organic and conventional crops. However, the credibility of these anti-organic research endeavors has been criticized, as the benefactors of these particular research institutes tend to be major agribusiness conglomerates (Burros, 1999; Stauber & Rampton, 2001). In advertising, Monsanto, one of the world’s most dominant seed companies explains on its website, “Some people believe the correct answer to our challenge is to move backwards in time toward an agricultural system that relies less on human innovations and more on human labor. While we respect that opinion, we don’t share it” (Monsanto). This company confronts the opposition through its interpretation of sustainable agriculture as “backwards,” assuming that these alternatives cannot also be innovative. The friction between these groups generates a deal of confrontation, in research and in media; however, the what’s most important is how policy-makers, international markets, and consumers interpret and accept these arguments, as they are the ones to control the implementation of the global food system.

Ultimately, both the conventional and alternative models have studies suggesting the triumph of their agricultural systems, and project future successes and long-term benefits, which makes it challenging to determine a clear “winner.” Conclusions depend on the framework in which one wishes to consider the issue, as it carries with it heavy political and economic

implications. Those in support of conventional agriculture more often use arguments of economic efficiency, convey statistics about the yield increases with the addition of nitrogen-based fertilizers, and consider world hunger to be the most immediate issue. On the other hand, those in support of the alternative agricultural system tend to focus on values such as environmental sustainability through the reduction of chemical inputs and the resilience of diverse ecosystems, as well look critically at the current political and economic systems facilitating various social and cultural drawbacks of the conventional system.

My approach to this research is informed by values of biodiversity, environmental stability and resilience. I find these values compelling, as they have been convincingly demonstrated in my education in ecology and sustainability, as well as supported by the organizations that I focus on in northeastern Thailand. Taking this approach allows me to understand the perspective and values of my case study stakeholders, as they take a critical stance on conventional agriculture and promote sustainable methods for the sake of their own benefits, environmental and otherwise. Particularly, this study focuses on the movements that are promoting integrated farming models, and the economic and social development plans that they implement to make this a viable option.

Development frameworks

While food security debates lend themselves to discussions of yields, environmental sustainability and economic feasibility all on a worldwide level, the debate of the global food system can also be framed in terms of peasants' rights and community development. In the 1970s, as agricultural modernization and global trade began infiltrating nearly every corner of the world, development theorists started taking special interest in the impact of traditionally rural, subsistence economies. How peasants of these regions respond to the vast array of impacts

caused by globalization became a curious and contentious subject. What happens to local knowledge, the environment, and livelihoods of subsistence communities, and how do the members of these communities respond to such changes? A number of development frameworks have emerged that consider these implications, and I highlight three of them – James Scott’s moral economy (1976), Samuel Popkin’s rational peasant (1979), and Anthony Bebbington’s viable indigenous model (1996) – all of which put forth different theories of peasant engagement with modern agricultural development. Moral economists see a conflict between global agricultural trade and the maintenance of communal culture, such that neoliberal development may erode the peasant welfare of subsistence communities, and with it, their cultural traditions (Scott, 1976; Bello, 2008; Edelman, 2005). Rational peasant theorists, however, see market options and new technologies as opportunities to relieve peasants from the strain and poverty of subsistence communities, and ultimately provide a means of economic relief (Popkin 1979; Hewison, 2000). Lastly, the third option eliminates the dichotomy of these first two theories to propose a middle ground – the viable indigenous model – which contends that the ends of cultural preservation can only be achieved by embracing the inevitable role of the global economy in the rural agricultural sector (Bebbington, 1996; Rigg & Nattapoolwatt, 2001).

Traditional subsistence communities are rooted in the “subsistence ethic,” which means that peasants base their decisions on minimizing failure by minimizing risk, as they cannot afford loss. This ethic has led Scott (1976) to refer to it as a moral economy, such that it fosters a system of reciprocity, shared labor, and communal resilience to maximize welfare. In these economies, a variety of techniques have been established to remain resilient, including the use of multiple seed varieties to assure that some portion of the crop survives in the event of environmental changes, and planting techniques that are learned and passed down over centuries

so farmers can produce the greatest yield possible. Communities also support one another through the sharing of crops, land and labor so that personal property and wealth were accumulated equally. This set-up is the classical view of communal and cultural strength in the face of limited resources and moral economists argue that the imposition of capitalism into these subsistence communities degrades peasant welfare, as it promotes economic inequality and allows for an individualization and segregated degree of advancement (Scott, 1976; Feeny, 2003; Bello, 2008). Furthermore, these cultural activists¹ make the argument that neoliberal trade and development degrades local culture, as it inhibits the growing of native seed varieties and the practice of traditional farming methodologies and ceremonies (Kusanthia & Piyasilp, 2010). In this way, the opening of the global market has changed the economic, social and cultural set-up of once-subsistence economies to a place of communal and cultural disconnect.

Though the moral economy perspective on peasant roles in opening economies was presented in the early 1970s, the argument still has its place today. In fact, between free trade agreements, agricultural innovations, and breeding technologies, the global market has only become more powerful and the role of development in agricultural communities more contentious. Referring to organizations that promote economic engagement with international trade, Bello (2008) explains, “The one-two punch of IMF-imposed adjustment and WTO-imposed trade liberalization swiftly transformed a largely self-sufficient agricultural economy into an import-dependent one as it steadily marginalized farmers” (p. 2). The rise of international development organizations such as the International Monetary Fund (IMF) and WTO seemed to have advanced the initial criticisms of international trade, and in response transnational peasant movements have formed to revive Scott’s moral economy (Edelman, 2005). La Via Campesina

¹ They have coined the “cultural activist” to be understood as the actors in a moral economy.

serves as a prominent example, as it is an international movement aiming to bring social and environmental justice to peasants, especially farmers, in the midst of the destructive global food system. It particularly opposes large companies and transnational corporations that are overpowering the traditional way of life for small-scale farmers (La Via Campesina).

La Via Campesina is responsible for defining food sovereignty as a human rights concern, and bringing it to the attention of international human rights groups, particularly the United Nations. Food sovereignty is described as the ability of a region or people to define their own agricultural, food, and land policies that are ecologically, socially, economically, and culturally appropriate (ISC-FFS, 2003 in Chappell & LaValle, 2011). This concept criticizes the current agricultural system's homogeneity of crops for the sake of simple production and marketability on the grounds that it restricts the farmer's ability to choose their crops, which may impact the social and cultural traditions of the farming communities. In promoting alternative agriculture for the sake of crop diversity and farmer autonomy, these international movements for social and cultural rights of farmers exemplify a modern moral economic movement, as they believe that the global food system negatively impacts traditional communities and peasant welfare (Edelman, 2005).

On the other side of rural development discourse, however, rational peasant theorists, also referred to as political economists, oppose this idealization of peasant communities and welcome global markets as an opportunity for economic growth (Popkin, 1979). The rational peasant is not viewed as a victim of open markets, but rather as a problem-solver looking to maximize his benefits in the face of complex development issues. In this framework, the pre-capitalist, rural community is often falsely depicted, as the struggles of peasants are painted in terms of a valorous triumph of culture, spirituality, and communal strength (Popkin, 1979).

Popkin (1979) argues that “somehow what might have been the necessities or oppressions of one era came to be interpreted as traditional values in the next” (p. 3). He argues that the ideal of egalitarian subsistence communities and culturally conscientious farmers that moral economists strive for is not a proper portrayal, as their way of life is no more than a struggle for survival. That being the case, rational peasants embrace the coming of an open market, as it can allow them to be freed from the shackles of subsistence livelihoods.

In a Thai case study investigating the debate between local populism and global involvement, Hewison (2000) makes an argument aligning with Popkin’s rational peasant model, as he finds that the sustainable agriculture movement is not a practical alternative to neoliberal development. He explains that the first failure of alternative farmers’ arguments is that they rely on rhetoric of rural-urban dichotomy, failing to acknowledge that the urban sector plays a critical role in the latter parts of rice production, such as processing, packaging, and transport. Second, they do not provide a viable economic alternative, as the focus on small-scale agriculture is unrealistic in terms of economic growth (Hewison, 2000). Ultimately, the alternative model does not provide a viable option for growth, and thus, farmers ought to embrace the coming of the global economy and the economic benefits it brings, as there is no return to the “hopeless idealization” of the moral economy (Hewison, 2000, p. 298). In this way, the case study supports rational peasant theory, arguing that the alternative is idealistic and unviable.

The moral economist and rational peasant represent two ends of the spectrum in considering neoliberal development on agricultural communities, but there is also a middle ground which presents peasants that combine the aspects of the moral economy’s call for cultural preservation, and the rational peasant’s acceptance of market involvement (Bebbington, 1996;

Rigg & Nattapoolwatt, 2001). This fusion – the viable indigenous model² – contends that the use of modern technologies and market options, if locally controlled and implemented, can be a means of both maintaining cultural tradition and expression of rights and liberation (Bebbington, 1996). The reality for nearly all traditionally rural communities now is that there is no longer a dualism between rural/agricultural and urban/industrial (Rigg & Nattapoolwatt, 2001). These communities straddle the line between agricultural and industrial livelihoods so that the conservative efforts of moral economists to “save agriculture” are no longer practical or best for the economic and cultural success of the community. So instead, farmers aiming to maintain a communal and cultural component must be pragmatic in accepting their role in market involvement.

I will refer to the viable indigenous model as represented by the “pragmatic farmer,” and under this framework it is argued that culture is much more than traditional technology and seed types – it is primarily about keeping to a location and maintaining a community (Bebbington, 1996). This being the case, the ends of cultural preservation are justified by the means of embracing agricultural technology and global market integration. In some ways, adopting liberal development schemes may actually be empowering, as the traditional technologies of the past represent oppression and limits to development (Bebbington, 1996). Rigg and Nattapoolwatt (2001) explain “seeking stability comes not from retreating into traditional forms of production but from embracing the new opportunities that are becoming available and, where appropriate and possible, allying these with more traditional pursuits” (p. 956). At this point in development, then, the call is to combine the political and moral economy by engaging in the global market for the sake of empowerment, and using that empowerment to preserve cultural rights. Otherwise,

² The term “viable indigenous model” is not explicitly used by Bebbington (1996) however I draw from his word choice to coin this term.

the alternative is to lose economic viability altogether, and hopes of cultural success along with it. In this way, the pragmatic farmers calls to divorce what's good for agriculture from what's good for rural people, admitting defeat of truly alternative agriculture for the sake of economic and social prosperity of people and their traditional communities (Rigg & Nattapoolwatt, 2001).

Thus, the frameworks for understanding cultural traditions as they relate to agricultural development leave peasants with three choices: resist all development for the sake of their agricultural knowledge and accompanying cultural traditions; embrace neoliberal development entirely for the sake of economic development and modernize; or accept the role of technologies and markets for the sake of surviving as a community and hopefully maintaining some degree of cultural tradition. My research aims to assess which framework the Thai non-governmental organizations and its farmers are operating under, specifically by understanding the importance of both the market and cultural tradition in farmers' growing decisions.

Alternative agriculture movements

While alternative agriculture movements have played a major role in this discussion thus far, they have yet to really be defined. For producers, I consider alternative agriculture to include one of the following characteristics: growing of crops through non-conventional methods, such as organic farming, integrated farming,³ intentional use of traditional technologies (e.g., water buffalo plowing and scythe harvesting, in the case of Thailand), and growing native seed varieties. Being a part of an alternative agriculture *movement* means that farmers engaging in such practices are members of a group, formally or informally, that share and promote such

³ Alternative and sustainable farming at two general terms that indicate farming styles that differ from conventional. Specifically, these styles include organic farming (i.e., without chemical fertilizers or pesticides) and integrated or diversified farming (i.e., multiple varieties of crops being grown on one farm). Though these terms all have their own meaning, I will often use some of the words interchangeably.

values between one another, as well as in the public sector. For consumers, an alternative agriculture movement is not necessarily an organization, but is instead characterized by a more conscious effort to purchase products that support the actions of the alternative producers (e.g., organic, fair trade, and local food items).

To begin to understand dynamics of Thai alternative agriculture within the aforementioned development theories, I started by exploring the movement in the most general sense. However, my initial review revealed an important (and personally surprising) distinction in the alternative agriculture movement literature. In studies concerning the United States, and the entire global north for that matter, the focus was primarily on the alternative movements from a consumer perspective, while articles on the global south were based on a producer's perspective. While in hindsight it seems obvious, I consider it worthwhile to point out this unrealized distinction, as it reveals a misconception of mine that influenced preconceptions at the start of my research; and moreover, exemplifies a potentially underlying tendency for westerners to (falsely) assume that this movement is considered in the same way throughout the world. So while discussion of the alternative agriculture movement of the United States does not directly inform my understanding of the movement in Thailand, a brief review is helpful in highlighting the differences between the two perspectives between the global north and south.

The alternative agriculture movement in the United States has been relatively progressive in recent years, and has been continually reworked over the course of various challenges. Moving from organic to fair trade, and now local food, each of these stages have seen successes and failures that highlight the challenges of informed and conscious consumption when competing with conventional agriculture and the power of agribusiness (Constance, 2008; Reynolds, 2000; Allen & Kovach, 2000; DuPuis & Gillon, 2009).

In a general sense, alternative foods such as organic are an effective way to combat the conventional market, as certification increases consumer awareness of production processes and the social realities behind exchange (Raynolds, 2000). And to some extent, organic consumption has begun to defetishize food products by raising awareness of production and health standards to connect the producer and consumer (Allen & Kovach, 2000). However, more recent consideration of alternative products is less optimistic. Some argue that while the organic market in the US began as a sincere attempt to market an alternative, over time it has been monopolized by agribusiness conglomerates and watered down by USDA policy leniencies, making it ineffective at combating conventional agriculture, and perhaps even enhancing their power to co-opt any system (Constance, 2008; DuPuis & Gillon, 2009)

In the case of fair trade, Barratt-Brown (1993) originally envisioned the fair trade market as operating outside of the current market system by providing farmers with technology, education, and power over value-added processes. In this optimistic lens, fair trade is viewed as a way to make consumers more aware of labor practices and social processes (Allen & Kovach, 2000). However, by some accounts fair trade has not lived up to these expectations, as it currently only operates within the existing system, and instead of resisting the systemic domination of neoliberal trade, it reaps small benefits from it, such as product premiums and small-scale community development projects (Fridell, 2006). Fair trade has become a market driven system, much like anything else, as limited demand makes access and expansion unrealistic in many cases. Furthermore, there is fear that in time, transnational corporations and agribusinesses will find a way to monopolize the fair trade market, just as they did the organic market, and remove even the few advantages it serves (Constance, 2008).

The newest alternative is localism, or civic agriculture, which is the “embedding of local agricultural and food production in the community” (Lyson 2004, p. 62 in Constance, 2008). Through outlets such as farmers markets, community supported agriculture, and community gardens, the hope is to create a network of organic, alternative farmers and their faithful consumers in order to keep the production small scale and personal (Constance, 2008). Paired with this focus on local food is a call for an increase in cultural and communal relationships to agricultural products, often expressed by organizations such as Slow Food (Slow Food). This newest alternative has been proposed, as many commodity systems analysts and civic agriculturalists are coming to the conclusion that there is no way to work in or around the global market if we want to find an alternative to the conventional food system. Rather, food systems must be kept small, local, and out of the hands of big business, as it is too easy to monopolize something as malleable as a organic or fair trade certification.⁴

While the progress of alternative markets in the US is commendable, the lessons they have learned throughout the movement are not relatable to developing countries. The main difference is that consumers play a major role in the alternative agriculture movement in the global north, as opposed to the producers in the global south. Consumers face an entirely different set of pressures with regard to the food system, as their motivations are most often based on making an environmental or political statement about the food system and global trade, and sometimes to promote better public health (Constance, 2008). In any case, being an active member of the alternative agriculture movement as a consumer has fewer direct pressures, as their agricultural choices are not directly related to their livelihoods.

⁴ Even at this stage, however, the US confronts the issue of accessibility, as organic, fair trade, and local foods are all considerably more expensive, making them unequally available across socioeconomic classes.

In developing, or newly industrialized countries (NICs) of the global south, the movement is primarily driven by producers, given that the agricultural sectors are still relatively large and often intertwined within global food trade. As such, the movements in the global south are more focused on practicing sustainable agriculture and finding a niche market that provides them the greatest degree of sovereignty in their food choices while earning them adequate income. Furthermore, the local consumer base in these areas is generally less engaged in alternative options, which limits the niche markets available to farmers. These key differences in the alternative movement between producer and consumer perspectives are important to recognize, particularly to those intending on working in the agricultural field of a country in the global south. The alternative movement varies based on a country's stage of development and consumer base, and to make no distinction between the two would be to miss the value of the alternative movement entirely. So to better understand alternative agriculture movements from the producers in NICs, my research focuses on the values of farmers involved in the agricultural alternatives in Thailand, and assesses the role non-governmental organizations play in expanding their farmer's niche market options, as well as the benefits of those markets

Non-governmental organizations and social movements

To understand alternative agriculture from the perspective of producers, particularly those in the global south, it's helpful to consider the nature of non-governmental organizations and social movements, as these tend to be the two most relevant actors. The traditional view of non-governmental organizations sees them as being from the global north, aiming to provide a service or foster development in the global south. These organizations often have hierarchical organizational structure, specific goals, and upward accountability to donors or governments (Bendaña, 2006; Earle, 2004). NGOs in this category will be referred to as international non-

governmental organizations (INGOs), as the distinction between international and national or local level organizations is useful in this discussion. Social movements, typically viewed as a grassroots formation by members in the global south, take collective action to make systematic changes to the political system (Bendaña, 2006; Earle, 2004). While both entities engage with civil society to enact some sort of social or political change, they are usually discussed either in isolation from one another, or pitted against one another, as the northern agendas of INGOs do not often align with the social movement campaigns. In the following sections I discuss the traditional differences between NGOs and social movements, explore criticisms and various theoretical debates about both groups, and consider the emergence of an NGO-social movement hybrid in this era of modern social actors.

NGOs

Non-governmental organizations are traditionally international organizations from the global north that serve in the developing countries to provide some sort of benefit to the public sector in categories such as health, environmental protection, and human rights (United Nations, 2004). While national and local level NGOs can exist, and have become more and more common, most of the literature and criticism focuses on international non-governmental organizations. In this section I explain how INGOs' goals have evolved over the past forty years based on the discourse and political environment in which they were created (Ebrahim, 2001; Bebbington, Hickey & Mitlin, 2008). Next, I review criticisms of INGOs which argue that they have failed to fulfill their goals of participation and empowerment due to top-down funding and upward accountability, and isolation of poorer class from leadership by the elite (Bendaña, 2006; Bebbington, 2007; Brunt & McCourt, 2012; Forsyth, 2007). Lastly, I explain the debate over the NGO-government relationship, which questions whether it promotes efficient and

effective action in the public sector, or generates a biased agenda on behalf of the INGOs (Bebbington & Farrington, 1993; Moore, 2001; Bendaña, 2006).

The goals of international non-governmental organizations have changed throughout the years based on the general trends in development scholarship at the time of the organization's creation (Ebrahim, 2001; Bebbington et al., 2008). First established in the mid-1950s to serve the "basic needs" of rural people, INGOs acted primarily as providers of services to the public sector without much engagement in systematic change. As development discourse evolved to include participation and alternatives in the 70s and 80s, INGOs began to integrate goals of capacity building and community empowerment, as well as become more critical of the role of the state and the market. This shift prompted early emergence of southern, local NGOs and recognition of the need for political change (Bebbington et al., 2008). Next, Ebrahim (2001) sees the third phase of the late 80s and early 90s as a positive turn, in which INGOs and NGOs began emphasizing the importance of sustainable development – environmentally, economically, and socially – which continues to be used as a key component in goal formation and rhetoric (Ebrahim, 2001; Bebbington, 2007). At the same time, Bebbington et al. (2008) point out that during this phase, NGOs of the north and south became co-opted by the agendas of state and development agencies, leaving little room to pursue large-scale alternatives. Though there is some variation in interpretation of the NGO trends, being aware of the development discourse relative to an INGO's or NGO's formation allows for a better understanding of their objectives and processes.

As the more recent discourse for INGOs is one of participation and sustainable development, the call for local empowerment infiltrates the rhetoric of numerous organizations, but their ability to achieve these values is contentious (Bebbington, 2007; Moore, 2001). Many

scholars criticize INGOs' ability to accomplish these goals, primarily on the grounds of upward accountability and elite leadership (Brunt & McCourt, 2012; Forsyth, 2007). Because the majority of NGOs are international, they tend to be foreign, external actors who are dependent on donors (usually with special interests), or have other allegiances to various sponsoring parties (Brunt & McCourt, 2012). By nature of their organization, INGOs are upwardly accountable to donors, governments, or organizational headquarters instead of the local people, which prevents them from truly collaborating and empowering (Bebbington, 2007). Instead, the rhetoric and motions of participation are more for show than legitimately collaborative, which has generated a great degree of criticism with regard to INGOs contribution to development in the global south (Brunt & McCourt, 2012). Furthermore, the nature of NGOs tends to put people of an elite position into leadership, whether that means foreign actors or highly educated locals. In either case, when leadership is not from the grassroots or relatable to the people the NGO aims to work with, then local groups may become disengaged – particularly those who are less educated and economically struggling – resulting in service providing rather facilitating local participation and empowerment that the discourse demands (Bebbington, 2007).

Similar to the issue of upward accountability to donors and organization headquarters, a source of debate for NGOs concerns their relationship with governments. NGOs can form on one of two premises: in opposition to government policy, or supplemental to it (Bendaña, 2006; Bebbington & Farrington, 1993). NGOs that are supplemental to the government are considered by some scholars to be problematic, as they are only furthering the interests of the state (Bendaña, 2006). For example, US Humanitarian Aid NGOs act on behalf of US government interests, given that they direct aid strategically to places that the government demands, rather than non-discriminately (Bendaña, 2006). NGOs which act as service implementers for

governments often have little creative contribution to the nature of their service, and little flexibility in their options (Bebbington & Farrington, 1993). As such, they are limited in the degree to which they can collaborate with their members, as the decision is ultimately out of their hands. Despite these potential drawbacks of government-affiliated NGOs, they can be useful in terms of information dissemination and long-term funding, as well as opening up doors for involvement in policy formation (Bebbington & Farrington, 1993). Moore (2001) goes even further to argue that NGOs are unable to empower its members if there is no government involvement. Without facilitating institutional change, NGOs serve no function in democratizing its members, which may ultimately result in their demobilization (Moore, 2001). Ultimately in this debate, NGOs are faced with the decision of coordinating with the government, which can be beneficial by providing stabilizing benefits but also limiting in the NGO's accountability to state-determined special interests.

Generally speaking, international non-governmental organizations have not been living up to their expectations in terms of providing local participation, empowerment, and sustainable development. In response to the criticisms, many INGOs have begun to re-evaluate, particularly based on whom they are accountable to and how they engage with local communities. In some cases, INGOs have begun to scale back, leaving room for the emergence of local and national NGOs from the south (Bebbington et al., 2008). These newer, local NGOs receive much less attention in scholarly literature, and are often grouped into the same discussion as INGOs, but I believe that in some respects these NGOs are exempt from the various criticisms of their international predecessors. Issues of donors and upward accountability are less prominent in these organizations, as grants, local foundations, and even the members themselves oftentimes fund local NGOs, eliminating some of the foreign special interest. However, selected criticisms

of INGOs are important to consider for local NGOs, such as government involvement and the dynamic between the between elite leaders and average members. These topics will be revisited in the discussion Thai agricultural NGOs after the case study analysis. Altogether, discussions about non-governmental organizations on the international scale is helpful in gaining a basic understanding of the relevant development discourse and criticisms, but is important to distinguish between INGOs and local NGOs so to avoid generalizations about these groups as a whole.

Social movements

Social movements are traditionally thought to be grassroots formations, usually in the global south, with semi-formal and flexible organizational structures and goals that aim to enact social change. Though these features distinguish social movements from non-governmental organizations, the concept is still very broad, as their fluid nature makes them hard to define. But in an attempt to do so, social movement theory is divided into old and new, which differ in terms of group identity, demands, and political engagement (Buechler, 1995). While these categories are helpful in thinking through movements and their differences, the reality of social movements is that they can take on a blend of characteristics with regard to new and old theories, making each movement a unique combination of characteristics rather than perfect models of either one.

Old social movement theory, based primarily in Marxist labor movements, sees movement mobilization as a result of economic motivations of the laboring class, aiming to challenge the government and economic system. New social movement (NSM) theorists (Dalton, Kuechler & Burklin, 1990; Melucci, 1989; Touraine, 1985; see Buechler, 1995 for review) however, aim to define the more modern movements that have emerged in a post-industrial economy, contending that they use identity as their unifying factor rather than class, focus on

post-material⁵ demands rather than economic ones, and resist conventional political involvement (Buechler, 1995).

In terms of identity, NSM theorists contend that a key component of these movements is their transcendence of class, and instead their unification around a particular identity, such as gender, race, environmentalism, or sexual orientation. These participants tend to be a blend of the new middle class, the old middle class, and groups outside of the labor class, as they are usually beyond class solely concerned with economic issues (Buechler, 1995). With the composition of its members being based on “new capitalism,” the demands of these NSMs are considered post-material, such that they are more concerned with rights based and culturally based arguments rather than economic gains. Furthermore, these theorists propose that the new movements’ approach to politics is different from old movements. NSMs see the state and civil society as different entities, with the state being viewed as corrupt and civil society as a collection of constructed social groups (Kitirianglarp & Hewison, 2009). That being the case, the social groups of civil society aim to change the state while not engaging the government or parties directly, as they are wary of institutionalized politics (Bourdieu, 2003 in Kitirianglarp & Hewison, 2009). This focus on social identity, post-materialism, and apolitical involvement are the hallmarks of a new social movement, and support NSM theorists’ argument that movements are taking a new, progressive direction in comparison to the old labor-based movements.

Despite the post-material, socially driven qualities of new social movement theories, it can be argued that in practice, modern social movements are not perfect representations of either

⁵ The term post-material is frequently used through NSM literature, however, it is important not to misinterpret the idea of “post-material goals.” This term should not imply that the material, or the economic, dynamic is no longer a part of the group’s concern. Instead, NSMs contend that they are rallying around something *other than* the material, which is not necessarily *post*-material – more so an extension of the material. Despite the fact that it may be misleading, I will continue to use the post-material term as it is commonplace in the literature.

theoretical model. Instead, most movements are a blend of characteristics old and new, urging us to discard the dichotomous conversation. To some scholars, there is no distinction at all between movements, arguing that NSMs are nothing but old social movements using stronger cultural rhetoric (Poltke, 1990 in Buechler, 1995). Similarly, many theorists consider particular characteristics of social movements to be flexible between new and old, as the line between classes and social groups, political activists and political resisters, and material and non-material goals is not as clear as NSM theory proposes (Castells, 1983; Calhoun, 1993; Buechler, 1995; Melucci, 1989; Kitirianglarp & Hewison, 2009; Brant, 1986).

While old social movements are supposed to be based in the laboring class, and NSMs in a socially constructed identity, these two groups are not mutually exclusive. Rather, cultural and social identities are often constructed right alongside class groups (Castells, 1983 in Buechler). In this way, NSM groups are very compatible with old theories, as laboring classes and socioeconomic status plays a role in construction of a shared identity. Furthermore, it is unfair to believe that nineteenth-century labor movements were driven solely on the basis of economic status (Calhoun 1993 in Buechler 1995), as there may very well have been components of a shared constructed identity motivating the movement alongside their position of class in the movements designated “old.”

Just as movement membership can be simultaneously based in class and identity, the same can be said for goal formation, such that the aims of social movements can be both material and post-material. Because identity is not exclusive to class, material gains may play a role in the larger fight for the rights of a social group – it just may not be as straightforward in their demands (Buechler, 1995). For instance, while women’s groups come together based on their shared identity as a gender, and often aim to eliminate gender bias and promote women’s rights,

there are material components to equality, such as earning pay equal to men. In this example, a new social movement can include goals for material and post-material, simultaneously, as a variety of rights issues have economic relevance.

Politically, old social movements are considered to prioritize political mobilization and participation, while new social movements generally resist political involvement, as they see no solution working within the system. However, these two categories raise the question of ‘what is political?’ as critics argue that NSMs’ claim of being apolitical is actually just an alternative method of political influence. By intentionally avoiding politics, they make a statement that is “discretely political” in the sense that it raises consciousness of the issue and prompts efforts of politicians to engage with the movement (Brant, 1986 in Buechler 1995). So while not political in the conventional sense, their alternative approach to politics may make them effective vessels for enacting political change (Melucci, 1989 in Buechler, 1995). In other cases, social movements that are considered “new” by categories such as identity formation and post-material goals are not always resistant to conventional politics, such that they value promotion of their goals more than their distaste for the government (Kitirianglarp & Hewison, 2009). So while a great deal of scholarly effort has gone into the debate between old and new social movements, qualities of a movements’ membership, materialism, and political engagement do not fit cleanly into separate categories. Rather, it is more common to find that these qualities end up straddling a line between old and new, leaving most movements to be characterized by elements of both social movement theories.

After comparing NGOs with social movements, and discussing their criticisms and compromises, I now turn to evaluate the potential for their convergence as social actors.

Traditionally, non-governmental organizations and social movements are distinctly different

groups, with regard to their origin, accountability, and organizational nature. However, NGOs have recently had to confront the criticisms of their organization, which point out their ineffectiveness collaborating with the local communities. In this case, reform calls for the emergence of local and national NGOs, which may be able to fill in the role of international NGOs with fewer conflicts in terms of upward accountability and local disconnect. Though there is little literature directly addressing this newest NGO emergence in relation to social movements, I would provisionally argue that in this new era of local NGOs, there is greater potential for these organizations to align with social movements, as they share goals of resistance to neoliberal development and grassroots engagement (Bendaña, 2006). Some contest the potential for social movements to pair up with organizations, as it detracts from their nature of resistance (Roy, 2004). However, this relationship may pave the way for effective action, as NGO-social movement teams can benefit from the strengths of each group: organization and effective political action by NGOs, and grassroots relationships by social movements. So despite the traditional distinction between NGOs and social movements, the line is becoming blurred as institutional engagement with local communities increases and social movements require help organizing. I find that the alternative agriculture movement in northeastern Thailand fits this hybrid form, as it combines a movement that has both old and new elements with local NGOs to create a network of economically and socially related groups that organize around particular goals for social and political change. That being the case, from here on out it is best to understand NGOs are local or national level actors that are generally allied with – if not directly related to – the movement for alternative agriculture to form a network of farmers rallying around environmental human rights.

Ultimately, though INGOs and social movements are often considered to be separate or at odds, the nature of these actors has gone through a number of transformations, encouraging reconsideration of their relationship. Ongoing criticism of INGOs for their lack of local accountability, ineffective development strategies, and elitism has, in some cases, prompted them to reform their aims to align more closely with the grassroots (Earle, 2004; Ebrahim, 2001; Bebbington et al., 2008). Moreover, there has been a more recent emergence of local and national NGOs in the south to take the place of ineffective INGOs, adding in new types of NGOs that have features distinct from their predecessors (Bebbington et al., 2008). The nature of social movements has also shifted, as old and new social movement theories challenge one another on goals of identity, materialism, and political engagement (Buechler, 1995). With NGOs and social movements undergoing reassessments of goals and processes, these groups are able to come together and work as a network, as they both share goals of grassroots participation, making political change, and resistance to neoliberal development (Bendaña, 2006).

Conclusion

The conversations set up for this research are important in forming views about the global food system, understanding the environmental and political conversations of alternative agriculture, and methods for approaching reform. The global food system, when considered in terms of food security, is a multi-disciplinary debate, with arguments primarily for either the maintenance of the current conventional system or the transition to a more alternative and sustainable way of farming. Conventional agriculture proponents make arguments based on the benefits of efficiency, innovation, and concentrated power, while supporters of alternative farming consider aspects of agrobiodiversity and sustainable land use. Development frameworks also open up a conversation about the role of farmers in these changing agricultural systems,

particularly in the transition from subsistence to global trade. The cultural activist of the moral economy model proposes that peasants are wary of global trade, as it strays from the practices and communal values of the traditional subsistence economy. The rational peasant of the political economy model says just the opposite, such that that farmers want to engage with the global market for their own economic gain. Thirdly, the viable indigenous model finds a middle ground in which farmers use the market to their advantage, ensuring economic stability so to engage in alternatives for social and cultural preservation whenever possible. However, the role of the market within the alternative agriculture movement plays two very different roles depending on whether it is considered from the perspective of the producer or consumer. The discussion in the United States is based primarily on concerns of consumption, which is valuable to consider, but says little about the movement on the production end. For the producers, alternative agriculture is much more wound up in the roles of farmers and farm policies, and the role of non-governmental organizations and social movements, as they are the primary facilitators. However, the role of NGOs and social movements is not always straightforward, and in the case of Thailand, a network that combines aspects of NGOs and social movements primarily organizes alternative agriculture, making it a unique blend of various group, goal, and political characteristics.

Chapter 2: The Dynamics of Thailand

Population dynamics and social context of Isaan

Thailand's history is based in a rich cultural tradition, representative of the various ethnicities and geographic regions. These ethnic groups include the Thai-Khmer in the southern part of the northeast region, the Thai-Laos of the northern northeast region, Thai-Muslim along the southern Malay border, and the "hill people" of the northern and western borders, comprised mostly of the Karen, Lahu, and Lisu (Central Intelligence Agency, 1974). In the mid-1800s, Thailand chose to abandon the *mueang* border system, in which each group's territories were defined loosely by geographic landmarks, and adapt the formal nation-state model put forth by western nations (Baker & Phongpaichit, 2005). Formal borders were drawn in 1902 with a high priority on land-grabbing, and little regard for the ethnic groups or informal borders, resulting in mixed ethnic groups along the Laos and Khmer border in the Northeast and the Burmese border in the North. In an additional press for uniformity, the Thai Nationality Act of 1913 declared that all those born inside the borders would claim the Thai nationality, attempting to nominally force out ethnic minorities (Baker & Phongpaichit, 2005).

In this paper I focus on the population in the Northeast, referred to as Isaan, which is strongly influenced by the culture of its neighboring countries, Laos and Cambodia. Relative to the country's five regions, Isaan has the largest population of 18.8 million (28.7%), followed by the central region with 18.1 million (27.7%), and Bangkok 8.2 million (12.6 %) (National Statistical Office (NSO), 2010). Isaan is considered the rice basket of the country, as it constitutes half of Thailand's rice fields (Feeny, 2003). Much of the population lives in rural areas and in 2002 more than 90 percent of rural households produced rice, illuminated the fact that agriculture plays a major role in daily Isaan life. Of these households, 60 percent are

subsistence, producing rice primarily for their own consumption, while the other 40 percent are commercial (Ekasingh, Sungkapitux, Kitchaicharoen, & Suebpongsang, 2007). Three *rai* (1 acre = 2.5 *rai*) suffice for subsistence, though the average farm size in Isaan is about 20 *rai*. In terms of land ownership, females are traditionally the members of the family who inherit the land, and so it is more common to have community matrilineal, with the males joining their wives' village. Within the agricultural labor, both males and females engage in farm work, though there are typically gender-specific roles. Males generally till and broadcast the seeds, females transplant the seedlings, and both usually harvest.

However, the dynamics of these communities are changing, as financial and social pressures to modernize and urbanize are beginning to stratify the rural demographic. Thailand's municipal areas are growing, with their population expanding from 29.4% (1990) to 44% (2010) (NSO, 2010). This move towards urban areas results in a trend of young and middle-aged individuals (20 to 45 years old) often leaving their communities, either for school or work in the city, creating an age-stratified population. As the trend towards urbanization increases, the population distribution will continue to shift, forcing rural communities to confront questions about the sustainability of their rural and agricultural livelihoods.

Economic development and policies

Thailand's move towards standardizing its ethnicity and borders is representative of its developmental history and current economic dynamic, such that the state favors the advancement of central Thailand with little regard to outlying regions. Thailand first exchanged with the western world in the mid-nineteenth century through the Bowring Treaty in 1855, establishing trade agreements with the United Kingdom (Baker & Phongpaichit, 2005). Trade quickly began to flourish, primarily in the rice exports of central Thailand, which allowed for unprecedented

economic growth and infrastructural development. This growth, however, was confined to the central region, while the North and Northeast remained generally static as subsistence communities. This trend represents Thailand's investment in the development of its central and southern regions, leaving the North and Northeast to be continually identified as areas with lower standards of living and traditional ways of life (Feeny, 2003).

The northeastern region of the country, Isaan, has been notably disconnected and disadvantaged in relation to the rest of the country. Its limited infrastructure for transport, in combination with poor environmental conditions, barred it from inclusion in the economic growth experienced by the central region (Feeny, 2003). It was not until after the Second World War that infrastructure began to expand beyond central Thailand to the Northeast, and with it came education, urbanization, and industrialization of agricultural practices, ultimately facilitating the region's move from subsistence living to conventional agriculture (Feeny, 2003). This nation-wide expansion led to an increase in the national and regional GDP, but the benefits were not equally distributed. Rather, the rural regions remained comparatively poor, as the mean household income in the Northeast was still only 66% of that in the central region in 1975 (Ikemoto, 1991 in Feeny, 2003).

Rice has been a cornerstone of the Thai export economy, and while it is still a front-runner for the world's largest exporter (United States Department of Agriculture, 2013), rice's role has declined in the late 20th century as industrial exports began to increase. In the late 1980s, Thailand acted on the World Bank's recommendations to speed up its growth to become an "emerging market." As such, foreign investments increased dramatically in the 1990s, allowing the country to invest in large development projects in the hopes of future growth. In 1995, however, the stock market began to slip and exports decreased, resulting in a near collapse of the

financial system, now referred to as the “economic crisis of 1997.” As a result, much of the industry management shifted into foreign hands, weakening the domestic economy and putting Thailand in a position of greater foreign dependency (Baker & Phongpaichit, 2005).

Following the economic crisis, the country’s policies for an economic rebound were magnified, at which point the development rhetoric and action began to diverge. Just after the 1997 collapse, King Rama IV made a speech on the “sufficiency economy plan,” which pointed the country toward inward reflection on Buddhist work values and stressed the dangers of dependence on the global market (Baker & Phongpaichit, 2005). Since then, the sufficiency economy plan (SEP) has been promoted through projects for rural development by request of the King, and is preached by rural farmers and royalists alike (ORDBP, 2009). The plan is also echoed in the National Economic and Social Development Board (NESDB), a national planning committee that puts forth a development plan every five years. The philosophy of sufficiency economy has been adopted as a guiding principle for the board, as each plan since 1997 makes mention of strengthening moral fiber through decreasing globalization and consumerism, bolstering of local communities, and preserving natural resources (NESBD, 2011).

However, the popularity of the SEP’s philosophy may be a false indicator of its practice, as politicians and planners use it as nothing other than a “rhetorical bow” to the King (Unger, 2009, p. 41). For example, despite the opening remarks about the importance of sufficiency, the NESDB plan simultaneously calls for more progressive and fast-paced development, such as investing in technology and chemical inputs for increased productivity, expanding the agricultural sector, working to increase market access, and increasing Southeast Asian relations to expand trade (NESDB, 2011). The contradictions between sufficiency values and neoliberal recommendations indicate that the King’s plans are not taken seriously in the larger scheme of

Thai politics. The King's sufficiency approach, then, is most functional as a primer for the less developed regions of the country so to shield them from the realities of globalization and neoliberal policies (Unger, 2009). So while the written policies and departments of Thailand provide an overall message of sufficiency, a deeper analysis indicates that the country still focuses on global development.

Thailand's embrace of global development schemes can be seen in their recent economic trends, as its economy has rebounded since the economic crisis and continues to expand. Though it still thrives as an exporter of rice, the country now also specializes in export of industrial materials such as machinery and transport materials, petroleum oils, electronic circuits, and rubber products (United Nations, 2010). The rise of technological exports has taken place in the central and southern regions, while the North and Northeast remain the country's agricultural regions. As such, the gap in economic inequality between regions remains, as the three richest regions – Central, South, and Bangkok as its own region – share 70% of the country's income with only 30% of the population, while the Northeast shares only 10% of the country's income among over a third of the population (International Monetary Fund (IMF), 2012). Ultimately, Thailand continues to promote economic development, despite the popular calls for a sufficiency economy, and further perpetuates the disproportionate growth and economic inequality between its regions.

Political environment

The economic development of Thailand reveals an inconsistency with the country's rhetoric and practice, much of which has to do with the country's political dynamic between the King and Thailand's two major political parties. While nominally a democratic government with a constitutional monarch, the Thai political system is laden with corruption, coups, and an

indirectly powerful monarch and military. I outline the role of the monarchy in Thailand, then discuss recent political trends and finally contemporary policies relative to agriculture and development.

Thailand is a constitutional monarchy, in which King Rama IX, Bhumibol Adulyadej, serves as a stable and often worshipped figurehead of the country. He has been in his position since 1946, making him the world's longest reigning head of state, and as such, he has tremendous indirect influence over its political dynamics. Much of this indirect power stems from Thailand's *lèse-majesté* law, which imprisons anyone who defames or insults the King or his royal family for a minimum of 15 years. The King has established himself as a champion of the rural poor – implementing small-scale development projects and preaching Buddhist work principles – winning him an almost religious popularity among the masses. Beyond the power of unlawful defamation and popularity, the King and his appointed Privy Council are closely linked to the military, allowing them to act as a triad of non-elected elites with unparalleled political influence (Chambers, 2010). Though Thailand has been declared a democratic nation since 1932, the indirect power of the elite triad in combination with the country's history of unstable, money-driven politics, has been an impediment to establishing a true democracy (Chambers, 2010).

In terms of Thai politics, the political divide can be crudely described as a rift between Thailand's elite conservatives (yellow shirts) and a newly politically empowered rural sector (red shirts). While political parties are frequently being dissolved and reinstated under proxy names, the most recent party titles have been the red shirts' United Front for Democracy Against Dictatorship (UDD) and Pheu Thai Party (PTP), and the yellow shirts' People's Alliance for Democracy (PAD) and Democrat Party (DP). The red shirts aim to eliminate corruption and money politics from Thailand's democratic system, and promote populist policies in favor of the

rural poor. This group is influenced by the party's previous Prime Minister, Thaksin Shinawatra (2001-2006), who changed the game of Thai politics by combining populist policies for the rural poor with an opening of the global market for the business middle-class (Hewison, 2010). He promised and delivered populist policies such as universal health care and farmer debt moratorium, and in doing so, engaged a group that had never before been recognized or much involved in Thai politics. On the other side of Thaksin's politics, however, his main goals were to bolster the business middle-class, integrating businessmen into policies, and opening up Thailand to a global economy. The yellow shirts are anti-Thaksin, as they represent the conservative elites who aim to maintain the country's tradition of elite rule, and object to dramatic neoliberal development schemes (though perhaps only rhetorically) in the name of royalism (Chambers, 2010; Hewison, 2010).

The divide between these two groups has been particularly hostile since 2006, at which time the ousting of Thaksin began a sequence of violent and tumultuous coups until 2010 (International Crisis Group (ICG), 2010). Thaksin had been re-elected for his second term as Prime Minister in 2005, only to be overthrown by the military in 2006 on charges of anti-monarchy behavior and corruption. The elite and the military then held power in 2007, drafting the country's most recent constitution, which promoted intra-party factionalism to prevent large political party formation in hopes of eliminating Thaksin-like regimes in the future (Hewison, 2010). Elections in 2007 placed a pro-Thaksin party back in office, only to be again ousted by the yellow shirts in 2008, at which point Abhisit Vejjajiva of the Democratic Party took premiership until the coup of 2010 (Chambers, 2010). The most recent coup in 2010 lasted from February to May during which time red shirts demanded fair elections in response to Abhisit's appointment into office. The protests ended in violence, political arrests, and failed negotiations

as Abhisit remained in office until August 2011 (ICG, 2010). It was then that elections took place, electing the current premiere Yingluck Shinawatra, Thaksin Shinawatra's sister, of the Pheu Thai Party.

Since Yingluck's entry into office, she has continued in her brother's footsteps in terms of implementing populist policies to bolster rural support. Specifically, one of the more controversial policies has been the "rice price guarantee," which began in year 2011-2012 and was renewed for 2012-2013, promising that the government will buy Thai Jasmine rice from farmers at 20% above the global market price (Suwannakij & Ten Kate, 2012; IMF, 2012). This policy was put in place to create financial benefits for farmers and provide incentives for growing mainstream rice; however, it has been poorly received as there is now a dramatic excess of rice in the hands of the government, and the plan has already cost the country 1% of its GDP, with more losses projected (IMF, 2012). Furthermore, the turmoil between the red and yellow shirts is still far from over, and there have been recent threats of overturning Yingluck's position. In November 2012, Yingluck braced the city for the rumored yellow shirt protest by implementing Thailand's Internal Security Act, which would authorize extra security to control violent flare-ups (Hookway, 2012). Though no significant protests have occurred, the tension between the groups continues to simmer, perpetuating the instability of Thai politics and undermining their election process.

Rice and traditional culture

Throughout Thailand, and particularly Isaan, there is a strong sense of culture with regard to rice and the spirituality of agriculture. The word for rice and food is one and the same (*khao*), and the common greeting between two people is to ask whether you've eaten yet (*gin khao*

rootyong?). Throughout Thailand, however, different environments lend to different rice varieties, creating a great range of diversity in growing style, appearance, and cultural use.

In the most general sense, rice can be divided into two types: non-glutinous (*khao jao*), which is the term of any “normal” grain, as opposed to and glutinous (*khao neow*), which sticks together when cooked. Glutinous rice, or sticky rice, has historically been cultivated in dry and mountainous environments, which include north and northeast Thailand, and southeastern Laos (Golomb, 1976). Glutinous rice is distinct from other types, as the grain is shorter, it typically has a higher sugar content, and the high levels of gluten makes it sticky and malleable when steamed. In the lower, moister areas of the Mekong sub region and lower central plains of Thailand, the amount of stagnant water doesn’t accommodate the growing of glutinous rice, and instead favors *khao jao*, or non-glutinous rice. This type of rice can be either long or short grain, but is different from sticky rice such that the grain is translucent and typically boiled (Golomb, 1976; Lefferts, 2005).

Based on its different geographic regions, land level, and water availability, Thailand historically had been home to hundreds of native rice varieties, all with particular localities in which they grow best and are traditionally preferred. Native varieties are cultivars unaltered by modern agricultural practices that have adapted to be strong in their specific environment, and typically play a critical role in the culture of the region (Tiranti & Negri, 2007). In Thai culture, the significance of rice is closely related to Buddhism, particularly the *Heed sib-song Klong sib-si*. These are ceremonies that take place each month of the year, according to the Buddhist calendar, many of which relate to the stage of the rice season – plowing, planting, transplanting, and harvesting (Kusanthia & Piyasilp, 2010). Before transplanting it is tradition for farmers to make an offering to the rice goddess by putting dust on the field and also offering a boiled

chicken and whisky. After harvest farmers invite the spirits of harvest into their rice storage house to protect their crop. Once the rice season is complete, *Boon Khun Khao Yai* is a ceremony in which farmers all bring an offering of rice to the center of the community. The rice is piled up and either given to the poor, or sold at a very cheap price, and the profits and remainder of rice goes to the temple (Kusanthia & Piyasilp, 2010). Each of these ceremonies has Isaan-specific practices that connect farmers to the growing season, playing a role in the region's agricultural traditions. Outside of these 12 Buddhist celebrations, rice plays a role in other ceremonial traditions, including funerals and weddings. In ceremonies such as weddings, rice-based treats (*kanom*) are traditionally eaten by the bride and groom. Each ceremony traditionally has its designated *kanom*, and different types of *kanom* require certain native rice varieties for them to be made properly. For instance, *kanom jean* (rice noodles) are best made with *Hom mali deng* (red rice) and *khao tod* (a steamed rice treat) is meant to be made with *khao neow dom* (black sticky rice).

While these examples are of the general Isaan tradition, it is important to recognize that just as geography is responsible for the great diversity of native rice varieties around the country, there is just as much nuanced diversity in the relationship between rice varieties, culture, and identity. Glutinous rice is an important cultural symbol for much of Isaan and least 50% of household consumption in Isaan is glutinous rice (Ekasingh et al., 2007); however, even within Isaan there are different preferences and cultural traditions attached to certain types of rice. Particularly, the southern-most provinces of the Northeast, Surin, Sisaket, and Buri Ram enjoy short grain non-glutinous rice, and try to distinguish their cultural relationship to rice as different from the rest of Isaan (Kusanthia & Piyasilp, 2010). This distinction is important, as most literature and common perception lumps the culture of Isaan together as all having the same

dietary preference for sticky rice (Golomb, 1976). However, these provinces identify themselves as Thai-Khmer rather than Thai-Laos (Isaan), as they are on the Cambodian border and have had a great deal of exposure to Khmer culture.

Based on this geographic distinction, the Thai-Khmer farmers of these southern provinces have subtly distinct traditions compared to the average Isaan traditions earlier described. First, the Thai-Khmer do practice many of the *Heed sib-song Klong sib-si* agricultural rituals such as making offerings to the spirits at stages of their rice season or the collection of rice in the community. Furthermore, their diet is different from northern Isaan, in that they use more coconut milk than fish sauce, and prefer short-grain non-glutinous rice to glutinous rice. Glutinous rice is used, but only for making rice-based treats. With the culture more situated around non-glutinous rice, many of their preferences and practices are centered around these varieties instead. For instance, *Niung Guang*, a popular short grain rice in the Surin region, is used in the blessing for a newly constructed house, as it represents long-lasting strength. Additionally, instead of using the *kanom khao tom* in weddings (which is made from glutinous rice) they use *kanom cho* (made from non-glutinous rice) to predict the quality of the marriage based on the appearance of the first *kanom* made (K. Ansii, personal communication, June 22, 2012). Ultimately, the role of rice is important to the lifestyles all across the Northeast, but there are variations in environment, preference, and practice that create a whole range of unique cultural dynamics based on the region and identity of farmers in Isaan.

Conclusion

The outlying regions of Thailand, particularly the Northeast, have been notably disconnected and disadvantaged in relation to the country's central region. Its ethnic populations have gone unrecognized by the Thai government, it has been slow to develop, and even in its

stages of growth the area has remained disproportionately poor relative to the rest of the country. Efforts to bring equal and sustainable development to the country get lost between royal rhetoric for sufficiency and political push for global integration. Isaan in particular has been generally ignored in the political environment until Thaksin became Prime Minister, but since then little has been accomplished due to the country's unstable political environment. However, this region still maintains unique dynamic, as their communal structure and agricultural traditions define its rural culture as it relates to farming and rice.

Chapter 3: Development of conventional and alternative agriculture

This chapter discusses Thailand's agricultural development, particularly as it relates to the move to conventional farming, and the subsequent alternative agriculture movement. I outline the emergence of various technologies and policies that the Thai government put in place to support industrial agriculture and enhance its place in the global rice market. Particularly, this discussion focuses on how the emergence of mainstream rice and modern technologies impacted farming communities, from its economic benefits to its various drawbacks. In response these drawbacks, the alternative agriculture movement emerged through the establishment of grassroots non-governmental networks. This chapter also outlines the various pathways of the rice commodity system to explain how involvement in conventional (governmental) or alternative (non-governmental) organizations plays a role in mill and market involvement. Overall, thinking about the role of governmental and non-governmental organizations in facilitating various forms of agriculture is important in understanding the pressures and opportunities guiding farmers' growing choices. Seeing the various agricultural, political and market options sets up my research to discuss how different types of involvement have influenced farmers' opinions of growing practices and values attached to certain styles of agriculture, particularly the traditional aspects of alternative agriculture.

Conventional agriculture and governmental policies

In the mid-20th century, industrialization, particularly the Green Revolution, swept even the most rural regions of Thailand. The Green Revolution was a phenomenon that emerged between 1940-1970, during which time a variety of technological advancements in agriculture arose. Among these innovations, chemical fertilizers and pesticides, combined with a shift towards mono-culture, brought about the focus of high inputs and increased yields. Also during

this time came a more systematic seed hybridization process, in which seeds were intensely selected and narrowed based on beneficial genetic qualities (Baker & Phongpaichit, 2005). In this move towards a more modern agricultural system, Thailand promoted mechanization, monocropping, and chemical inputs as the most efficient way to grow rice. Furthermore, Thailand established a Rice Breeding Division within its Rice Department, which collected and selected for the strongest rice types between 1950 and 1967 (Panyakul, 2003). Through this rice breeding process, the government settled on four major rice varieties based on their lab-tested and hybridized strength: *Khao Dawk Mali* 105, and *Kor Khor* 6, 10, and 15. *Khao Dawk Mali* 105 and *Kor Khor* 6 are the varieties suited for the wet season, which is the primary growing season, whereas *Kor Khor* 10 and 15 are dry-season, making them less common.

Khao Dawk Mali 105 is called *Khao Hom Mali* 105 by farmers, and commonly referred to as Jasmine rice in English – for the sake of this paper I will refer to it as Jasmine 105. This variety is the country's primary export, and it is a non-glutinous variety that is most popularly noted for its soft and fluffy grain that smells like jasmine flower when cooked. *Kor Khor* 6, also referred to as RD 6 (RD standing for Rice Department) or *Gaw Kaew* 6 by farmers, is a glutinous rice that is less widely known on the international level but popular domestically and around Southeast Asia. For the sake of this paper I will be referring to it as Sticky rice 6. These two varieties, together with the dry-season *Kor Khor* 10 and 15, constitute the government-promoted mainstream rice varieties, selected for commercial use. Mainstream rice is distinguished from native rice, such that native varieties are cultivars in a specialized region in which the seeds are selected but not standardized. The mainstream varieties, however, are bred and sold by the government, bought based on a federal rice quality standard, and are most common in domestic and international markets.

The promotion of these mainstream seeds exemplifies how the government has prioritized homogeneity and high yield in their rice crop for the sake of the market over the existing regional diversity. The government has supported the conventional agriculture of the Green Revolution, particularly through increased subsidies on the importation of pesticides and machinery (Panyakul, 2003). After 1991, import taxes on those items dropped from 6.9% and 27.6%, respectively, to almost zero, and during that same year 98% of the Department of Agriculture's budget went towards research for pesticides (Panyakul, 2003). Pesticides are made readily available, and the total pesticide use for rice farming is 9,000 – 10,000 tons annually. Furthermore, Thailand has one of the highest rates of pesticide registration, with 298 pesticides registered and over 2,200 brand names (Panyakul, 2003). Beyond inputs for increased production, the government also promotes mainstream rice by controlling rice distribution and processing at each stage of the commodity pathway. Agricultural extension offices only sell and educate farmers about the mainstream varieties, and government mills are geared exclusively towards these types. The selectiveness for mainstream varieties is to ensure no mixing of other rice types, so to simplify the processing, packaging, and exportation of the crop. In these ways, the Thai government prioritizes the country's role as a rice exporter by ensuring standardized quality of only a few types of rice and promoting high yields by means of Green Revolution machinery and chemical inputs.

Drawbacks of conventional agriculture

The transition to mechanized agriculture and mainstream seeds improved the agricultural sector in terms of yields, income, and overall production. Rice yields in the mid-late 20th century went from an average of 1.55 tons/ha (1961/62) to 2.26 tons/ha (1997/98) and agricultural land was expanded, indicated by the amount of forest cover which dropped from 45% in 1961 to 14%

in 1985 (Panyakul, 2003; Feeny, 2003). This expansion led to an increase in the country's GDP, as well as an increase for the Isaan region, opening up its economy to the realm of industrial agriculture. The benefits of conventional agriculture, however, did not come without a cost to the farmers, as the drawbacks of conventional agriculture include negative health effects, crop vulnerability, quality variation, labor shortage, debt, and cultural change.

Pesticides are abundant, diverse, and readily available to farmers, as the Thai government promotes their use so to maintain high yields. However, the main pesticides promoted in Thailand are banned in places such as the United States and European Union, and even among Thailand's neighbors – Laos and Vietnam (AAN et al., 2011) – because of the adverse health effects. Specifically, four pesticides – Carbofuran, Dicrotophos, Methomyl, and EPN – have resulted in numerous health problems for farmers, as proper handling and mixing instructions are absent from containers, and health risks are unmentioned. Health risks of these pesticides include heart problems, chronic brain problems, and genetic mutations (AAN et al., 2011). More commonly, farmers exposed to the pesticides suffer from rashes, nausea, and bodily aches after spraying. Either way, the abundant promotion and lenient regulations regarding importation and use have created widespread health concerns for farmers.

Limiting rice diversity to only one or two mainstream varieties also increases crop vulnerability. Because they are standardized seeds, mainstream rice does not allow for region-specific variation, which can make it more susceptible to pests, disease, and environmental changes compared to native varieties. For example, many native varieties have resistance to particular pests in the northern region of Thailand, whereas Jasmine 105 and Sticky rice 6 do not (Oukpaew, 2011). This is due to the extreme selective measures of conventional agriculture, replacing native cultivars with uniform genetic varieties, and decreasing the diversity of species.

Similarly, the quality of Jasmine 105 varies across the northeastern region, despite the fact that it is promoted all throughout. Surin province, one of the provinces to which Jasmine rice was originally native, has the most favorable land for this type of rice. However, a study comparing Jasmine 105 grown in five other provinces in the Northeast is considered reveals that they are of less favorable quality compared to Surin, exemplifying that certain rice varieties, particularly the mainstream ones, are not environmentally suited for all regions of Isaan (Pitiphunpong & Suwannaporn, 2009).

Furthermore, when growing multiple rice varieties, farmers have the ability to harvest incrementally, as different varieties have different rates of maturity. Without these varieties, however, the harvest period is confined to a 15-day window, meaning labor must usually be hired, or more often, a harvest machine must be bought. In this way, mainstream varieties cause a labor shortage, as all farmers are harvesting at once as opposed to the shared communal labor of the incremental harvesting model. Additionally, the purchase of a harvest machine becomes one of many financial inputs required for conventional farming, which increases the amount of money farmers must invest in their crop. Beyond machinery, farmers must purchase mainstream seeds every two or three years, as they are not saved as easily as native seeds, and they must purchase pesticides and chemical fertilizers to get the highest yield from those seeds. So despite the improved economy seen by Isaan after the Green Revolution, the financial benefits have been counteracted by the increased inputs, ultimately putting farmers in greater debt. In 1993 45.9% of the farming population in the Northeast was in debt at an average of \$10,712, and in 2003 that number expanded to 61.1%, averaging \$27,544 in debt (NSO, 2003 in Ekasingh et al., 2007).

Lastly, the limitation of native varieties affects certain cultural practices. As explained in Chapter 1, rice plays an integral role in rural Thai culture, and the loss of rice varieties alters

their traditions as they relate to farming practices and traditions. For instance, black sticky rice is often used in the making of particular rice-based sweets (*kanom*), but this type of rice has become less and less common as milling access and market demand shift towards mainstream rice. One farmer noted, “Local varieties help people connect more to culture because Isaan has a lot of the traditional or religious culture, and each specific culture requires a specific type of rice in order to make specific foods... so when we get back the local varieties we get back some of our culture” (W. Tongnoi, personal communication, September 21, 2011). Furthermore, with the use of chemicals and pesticides farmers are less concerned by weather patterns and pests, as they no longer rely on them for the safety of their crop. As such, ceremonies related to rainfall and spiritual protection of their crops have become less frequently practiced, as farmers are now dependent on the agro-chemical, not spirits. With more modern technologies and fewer native varieties, there seems to be an increasing disconnect between farmers and their traditional practices, from food production to religious ceremonies, indicating that mainstream rice varieties are shifting the traditional norms of rural lifestyles.

Alternative agriculture and non-governmental organizations

In response to the drawbacks of conventional agriculture, local non-governmental organizations (NGOs) began to form. Gaining momentum in the 1980s, these NGOs argued that the development policies implemented by the central Thai governments over the past twenty years were not benefitting the majority of the country. One of the most notable cases is the Assembly of the Poor (AOP), which is a network formed in 1995 to rally around environmental issues for the local poor and take a critical stance on Thailand’s development projects and policies (Missingham, 2003). The AOP is broken into groups each representing different social and environmental issues of concern to the rural poor, including dams and water rights, land

tenure, agriculture, slums and urban life, and fisheries. The group first made its mark in 1996, when thousands of its members gathered in Bangkok to protest the government's policies for neoliberal market expansion and development plans that abused natural resources (Baker & Phongpaichit, 2005). Since then, this movement has barred the construction of dams and mines, protested against pesticide import policies, and successfully gained land rights for displaced communities. Furthermore, each of the AOP's environmental subsets developed relationships with various local non-governmental organizations to organize the efforts of their movement and create a group with concrete goals and initiatives. The AOP network illustrates the hybrid model described in Chapter 1, such that a social movement networks with NGOs so to effectively unite and serve the interests of the poor from the grassroots.

My research focuses on the agricultural subset of non-governmental movements for environmental human rights, and their response to the conventional agricultural system. While it is common for scholars to question the participation of locals in non-governmental organizations, as well as their upward accountability (Earle, 2004; Ebrahim, 2001; Bebbington et al., 2008), this is not the case of these Isaan agricultural organizations. The relationship with the Assembly of the Poor gives it a uniquely grassroots establishment, as it has linked up a participatory movement. Furthermore these Isaan NGOs are mostly separate from external influence, as they are founded and organized by Thai farmers, and financial support for these groups range from independent funding by its own members to both domestic and international grants (U. Yoowah, personal communication, June 16, 2012). As such, it is more useful to think of the alternative agriculture movement as a network, as it shares qualities of both social movements and NGOs, as will be explained in the discussion of my research results.

The Alternative Agriculture Network (AAN) takes the center of the NGO conversation as it acts as one of the more dominant facilitative forces in the movement for sustainable agriculture. The network's goals are to conserve local rice varieties for environmental and cultural preservation, build community resources, create relationships with government officials for the advancement of sustainable agriculture in policy, promote youth in farming, and create alternative green markets throughout Isaan (U. Yoowah, personal communication, June 16, 2012). Some of their special initiatives include organizing workshops for activities such as making biofertilizer and compost, and cultivating community plots and seed banks where they can preserve local seed varieties through the sharing of knowledge and seeds (B. Mahtkao, personal communication, June 15, 2012; A. Saengubon, personal communication, July 20, 2012).

In addition to growing as an organization themselves, the AAN aims to facilitate the growth of other organic farming groups, resulting in a number of "daughter" NGOs around Isaan that are linked up to and inspired by the AAN. These pockets of organic farming groups have started in numerous communities throughout the northeastern region, usually beginning as grassroots groups that sought out the AAN for resources and support to get their organization off the ground. Many of these groups are organic or in the process of transitioning to organic with the hopes of becoming more sustainable in their growing practices and expansive in their market options.

The Natural Agriculture Group (NAG) in Surin Province is a non-governmental organization that established itself in 1992, independently of the AAN, but has a strong affiliation and some organizational overlap with it for the sake of support, networking, and resources. NAG is group of organic farmers who share goals similar to those of the AAN, as they educate farmers about the value of organic farming, integrated agriculture, seed saving, and

preservation of local varieties. These farmers acted as major catalysts in the Thai organic movement, and continue to expand organic membership as well as empower farmers through the establishment of alternative markets for their organic and local products on both the regional and the international level.

Though distinctly grassroots in nature, with both members and organization leaders coming from rural Isaan communities, it should be noted that the leaders are often more educated and usually wealthier than the member farmers. As such, though the goals and structures of these networks are clearly articulated by the leaders, not all of the concepts are understood by the farmers themselves. There are exceptional member farmers who recognize the ecological and cultural importance of growing native varieties; however, the average NGO farmer may not understand concepts such as food sovereignty and seed patenting (U. Yoowah, personal communication, June 16, 2012). With this in mind, my research focuses on the member farmers themselves, and the degree to which organization involvement impacts the farmers' values, and practices.

Rice commodity pathways

Having outlined the development of conventional and alternative agriculture and various aspects of these types of farming, it is important to consider the options that each of these groups have in terms of seed access, milling, and markets. The 'rice commodity pathway' (Figure 1), provides a generalized look at the relationship between the organizations farmers are involved in and the available types of rice mills and markets. Though this visual representation does not reflect the percentage of farmers involved in each of these groups – as the vast majority of farmers belong to government organizations and are involved in the middle, conventional

pathway⁶ – the rice commodity pathways figure captures the relationship between organizational involvement and mill and market access.

Based on my survey sample, most farmers are growing the government's mainstream rice varieties, which mean that they are likely interacting with, buying from, or selling to a government organization (GO). Government farmers' organizations can include agricultural extension offices, cooperatives for loans, or milling groups (Ekasingh et al., 2007). Involvement in these groups is common, as their presence is accessible in nearly every district and made convenient to the farmers. However, such involvement impacts farmers' options along the commodity pathway, from seed selection to market outlets.

Mainstream rice varieties are promoted along the governmental pathway (the middle group in the figure), first by providing only these seed types at extension offices and cooperatives. Farmers in these organizations then sell their rice to government or privately owned mills, which I term "conventional mills," because they accept primarily the government-approved mainstream rice and have no regard to chemical use. The government and private conventional mills sell rice to various wholesalers, after which point the rice goes to "conventional markets," which distributes one third of the rice to domestic regions outside of Bangkok, one third to Bangkok, and the final third exported internationally (Ekasingh et al., 2007).

The alternative to these conventional practices and pathways promoted by government organizations, however, is often through involvement in a non-governmental organization (right-most path in the figure). Membership in a non-governmental organization provides services

⁶ While no exact data could be found on the percentage of farmers involved in NGOs in Isaan, I estimate that less than 3% of the country's farmers are members of these alternative groups based on discussions with NGO leaders about their membership relative to their province.

similar to that of GOs, however these services are usually more diverse in their seed access, mill, and market options. Moreover, NGOs also provide farmers with educational resources for alternative farming methods (e.g. organic), and an extended network of alternative farming support. It should be noted, however, that not all farmers who are NGO members utilize all of the options available to them in the alternative pathway, as many still grow mainstream seeds and sell their crop to the government's conventional pathway.⁷

Among non-governmental organizations, a greater variety of seed types are available and often promoted for the sake of diversity maintenance. If growing these native seeds, or even mainstream seeds organically, NGO members then have the option of selling their rice crop to an "alternative mill." These mills are either NGO, community, or privately owned, and are considered alternative because they accept rice types other than mainstream varieties, and may also distinguish between organic and inorganic. Many NGOs and alternative mills then give access to alternative market options, such as local and domestic niche markets, or international fair trade, which specialize in native and organic rice. Local and domestic niche markets include local NGO-established Green Markets, hospitals, and specialty health food stores in metropolitan areas, especially Bangkok and Chiang Mai, where demand for such products is higher. The two international fair trade organizations in my study include Green Net (Yasothon) and Alter Eco (Surin), which sell in various outlets in the EU and US.

Outside of governmental and non-governmental organizations, farmers can also choose to be unaffiliated with any formal network. Typically, unaffiliated farmers save their own seeds from their community or family, then sell to private conventional mills or process their rice at a

⁷ Based on my sample, 47% of NGO members are also utilizing resource or mills of government organizations, indicating that NGO involvement does not exclude them from still engaging with GOs.

household mill for their own consumption. It should also be noted that the option of household milling for personal consumption is a route available and utilized by most farmers,⁸ and it is common for at least one community member to have a small household mill who will share with others for household consumption and local sales.

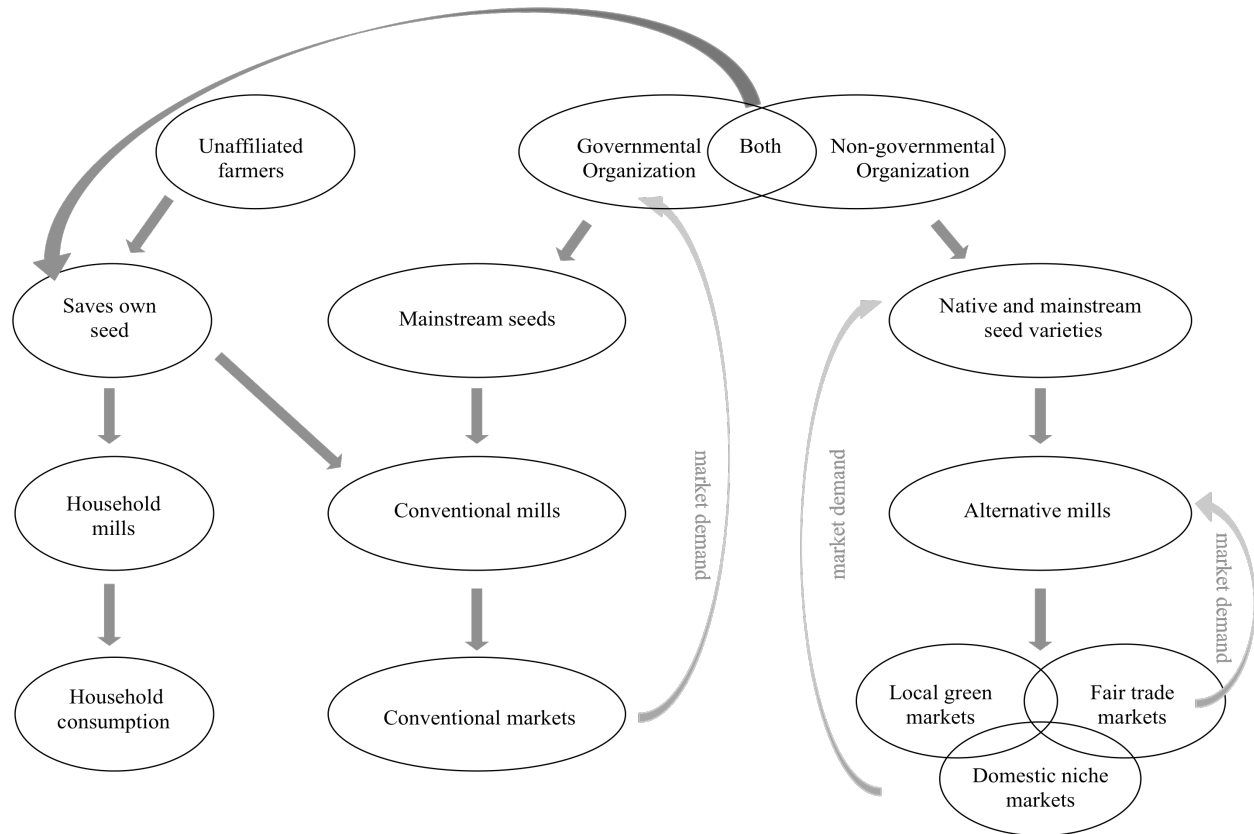


Figure 1. Rice commodity pathways

Beyond the routes themselves, it is also important to consider the ways in which these pathways feed back into one another via market demand (represented by the lighter gray arrows). In the conventional pathway, the demand of the market, most powerfully the international

⁸ In 2005, one fifth of the rice production in Isaan was kept for household consumption (Ekasingh et al., 2007)

market, feeds directly back into the governmental organization. The global market is what informs the Thai governments' prices and policies on export, and ultimately dictates the standardization of mainstream rice varieties and the subsequent step of uniform milling. In the alternative pathway, the market still has power, but the non-governmental organization itself is not directly impacted. Rather, market demand puts pressure on other stages, such as the alternative mill, or even on the farmer themselves. For instance, an alternative mill that supplies directly to a fair trade business in the European Union is responsible for managing the demand of the business. In other instances, the demand directly influences farmers' seed choice, such as farmers selling at local green markets. In either case, though the non-governmental organization links farmers with alternative mills and markets, the role of market demand plays a less direct role on the organization itself. This reduced impact is what allows the non-governmental organization to form goals that reach beyond the market, such as increased agro-biodiversity for the sake of environmental resilience or cultural tradition. However, with market demand still present for farmers, it plays a role in the dynamic between member farmers and the organization's goals, which will be explained in greater detail in the analysis of my results.

Conclusion

Since the mid-20th century, agriculture has undergone dramatic changes in its technologies and global trade involvement, causing a number of drawbacks for the farming community. As such, non-governmental movements have emerged as a small but notable force to consider alternatives to the conventional governmental path. The rice commodity pathways figure is a simplified outline of the options that farmers have for processing their rice based on the type of organization they are involved in. Though a farmer can be involved in multiple combinations of pathways, it's important to understand the difference between the conventional

and alternative farming process, and the influence that each organization has on its farmers. With these pathways in mind, I consider the role of organizations and pathways on farmers' growing practices, rice-related values, and agricultural traditions to determine the impact of NGOs on the average member-farmer. Understanding the impact of organizational involvement on these variables will help us understand how effective NGOs are as facilitators of the alternative agriculture movement, as well as shed light on how producers view their position and needs within the alternative agriculture movement.

Chapter 4: Methods and Results Discussion

Methods

Six locations across northeastern Thailand were selected to represent varying degrees of NGO involvement: Yasothon, Surin, Khon Kaen, Kalasin, and Chaiyaphum provinces. Surin and Yasothon represent the two major strongholds of the alternative agriculture movement (AAN and NAG), and Roi Et and Khon Kaen are developing small ‘daughter’ organizations in relation to the AAN. In Kalasin, a progressive government official recently worked with farmers to establish an organic group, now independent from the government, that practices alternative agriculture. And lastly Chaiyaphum has a number of farmers who neither affiliate with governmental nor non-governmental organizations. Based on my sample, the farmers that were surveyed had an average age of 50 years old, owned about 16 *rai* of land, and had a sixth grade education (Table 1).

Province	N	Male	Female	Age	Land (<i>rai</i>)	Grade level
Chaiyaphum	12	4	8	50.3	10.1	5.5
Kalasin	10	4	6	49.6	14.2	8.9
Khon Kaen	10	5	5	51	11.5	6
Roi Et	6	2	4	50.2	14.3	4.3
Surin	30	16	14	50	25.9	5.9
Yasothon	16	3	13	51.2	19.4	5.6
Total	84	34	50	50.3	15.9	6

In each location I conducted in-depth interviews and surveys in addition to ethnographic immersion, working on farms and living with families involved in various non-governmental organizations. The in-depth interviews were conducted with over twenty key players including

NGO representatives, government officials, and mill managers⁹ in order to understand the structure and goals of different organizations.¹⁰ The surveys were conducted throughout the villages, and the sample farmers (N = 84) were randomly and non-randomly selected so to represent those involved and not involved in the non-governmental networks. In this case farmers were selected by means of snowball sampling, as well as random sampling in a given area.

The survey (Appendix B)¹¹ addresses questions of organization membership, rice-growing practices with regard to the types of rice being grown, the motivations for growing certain rice, the perceived importance of growing native rice, and the type of market pathways in which the farmer was involved. Furthermore, the survey asked about the value of rice varieties in Thai tradition, and the degree to which the farmer practices these traditions.¹² Using these

⁹ Major interviewees included: AAN Policy Coordinator for Isaan, AAN Isaan Regional President, AAN Yasothon President and “local seed doctor,” AAN Surin Farmer Outreach Coordinator, NAG President, NAD Coordinator and SRF market liaison, NAG seed specialist, SRF mill manager, *Rak Thammashad* (Green Net Yasothon) mill manager, Sai Na Wang District Government Representative, Khon Kaen Organic Group Leader, and Roi Et AAN leaders.

¹⁰ This research methodology was modeled after Friedland’s (1984) and Dixon’s (1999) commodity systems analysis. Specific to this method is the premise that commodity systems have a “social reality,” in which there are a number of dynamic interactions that go into the food system – production practices, labor, technology, marketing, distribution, and organizations structures. In order to conduct this analysis, Dixon (1999) proposes monitoring every step of a commodity’s process – growers, processors, community organizations, regulators, and politicians. I used this approach as it allows me to understand the distribution of power, which informs the roles of government policy and market standards in the decision-making processes of farmers and NGOs.

¹¹ My research was conducted alongside a research partner with a different research agenda, and so the survey includes questions for both research projects. The questions concerning climate change were not used in my analysis.

¹² In order to measure the practice of traditions relative to agriculture I combined responses to three highly correlated questions ($p < 0.001$) on the subject, including whether or not the farmer practices any agricultural rituals (0-1: 0 = no, 1 = yes), how seriously and passionately these rituals are practiced (1-5: 1 = least passionate, 5 = most passionate), and what particular rituals are practiced (0-2: 0 = no practices, 1 = only a fraction of the practices such as only planting or only checking the “good day” on the Buddhist calendar, and 2 = doing all of the practices). The

variables, my research analyzes how organization and market involvement affects farmers' crop choice, perceived importance of native rice varieties, motivation for the growing of certain rice-types, and practice of traditional rituals related to agriculture.

Drawing from both quantitative and qualitative analysis of my research, I find a number of significant results that lend themselves to a rich discussion with regard to the role of local NGO networks, development frameworks of NGO leaders and members, and the larger dynamics of the agricultural social movement in Isaan. This discussion will clarify three key results: (1) Isaan agricultural NGOs are successful facilitators of alternative farming practices and values. (2) These NGOs fit best within the viable indigenous model of development, as they consider the rational, market-based demands of its members on balance with the more abstract goals of the leaders. And lastly, (3) the network of agricultural NGOs demonstrates the structural qualities (and conflicts) of a non-governmental organization, while promoting a combination of values characteristic of both old and new social movements – political and cultural, economic and post-material – best categorizing it as an NGO-social movement hybrid. Throughout the discussion I highlight how these conclusions could serve as recommendations for NGOs in the field. Finally, I present findings of outlier groups, such as government-NGO relationships and unaffiliated farmers, to consider the benefits of organizational types that are beyond the basic GO-NGO division.

NGO efficacy

Non-governmental organizations in Thailand play a unique and prominent role in the country's move toward sustainability, and are effective at promoting alternatives to the conventional agriculture system. While the NGOs generally discussed in literature operate

number of respondents who fully answered the survey with enough data to complete this measure of culture was smaller proportionate to the full sample (n = 33).

internationally, in the case of Thailand the NGOs of focus are either local or nationally run groups. I briefly summarize the benefits of local NGO involvement based on my surveys and follow-up with recommendations for NGOs in the field.

The effects of non-governmental organization involvement play a significant role in terms of farmers' alternative agricultural practices and values (Table 2).¹³ First and foremost, farmers in alternative agriculture NGOs are significantly more likely to grow organically, or be in transition to growing organically, than farmers in GOs. And while mainstream varieties account for the majority of all farmers' land, my surveys indicate that non-governmental farmers grow them on a significantly greater portion of their land (21% of land) compared to farmers in governmental organizations (4% of land). Those involved in NGOs also grow a significantly greater number of native varieties than those in GOs, indicating that they have greater diversity of seeds along with their larger devotion of land to native varieties.

Survey question	Organization	n	Mean	<i>p</i>
Grows rice organically (Rank 0-2)	GO	24	0.33	
	NGO	29	1.55	> 0.001*
Land area with native varieties (%)	GO	24	3.71	
	NGO	29	21.07	0.003*
Number of native varieties grown	GO	24	0.13	
	NGO	29	0.86	0.012*
Native varieties are important to grow (Rank 1-5)	GO	23	1.87	
	NGO	26	3.58	0.001*

Note: Data drawn from an independent t-test. Significance (*p*) is two tailed, equal variances not assumed. An asterisk (*) indicates a statistical significance ($p < 0.05$)

In addition, NGO farmers place a significantly greater importance on the growing of native varieties (3.58 of 5 on Likert scale) when compared to GO farmers (1.87 of 5),

¹³ These tests used governmental and non-governmental membership as independent variables, which exclude unaffiliated farmers and farmers involved in both GOs and NGOs, so to get a clear look at the effects of each group independently.

demonstrating a stronger commitment to native varieties in terms perceived value. A greater engagement with native varieties in term of number, percentage of land, and perceived value may indicate greater access to alternative types of seeds, a greater degree of freedom in growing choices based on expanded market options, or simply a greater interest and understanding of growing multiple seed varieties.

Overall, farmers in non-governmental organizations exhibit significantly more alternative practices and values with regard to native rice varieties. By these standards, much has been accomplished with regard to NGOs' goals for alternative agricultural practices. Though these agricultural NGO networks have seen success thus far, a relatively straightforward recommendation for NGOs working in the field would be to focus on improving network communication and educational outreach. The causal direction of network involvement is indeterminable within this research, meaning that I do not know whether the network fosters education towards alternative farming practices, or whether it is those who wish to practice alternative methods who find the network – or a combination of the two. Though the directionality of the study is unknown, it's clear that a critical part of the alternative movement is the network relationships, and how those relationships facilitate a more diverse and engaged education, set of values, and practices. As such, NGOs should work on increasing membership and expanding networks, as well as continue to engage their members in educational workshops and community based projects such as seed banks and experimental plots. Continuing in education for sustainable farming methods, as well as those that inform farmers about the values of seeds and environmental understanding, is critical to continue strengthening the network and its goals.

Motivators and development frameworks

Beyond the effectiveness of NGO involvement and alternative agriculture practices, a major focus of my research was to determine the factors contributing most significantly to the farmers' rice variety choices and discuss these findings in the context of the three development models presented in Chapter 1: the moral economy, the rational peasant, and the viable indigenous model. I find that though the motivations and values of NGO members and leaders place them into different development models, the organizational structure aims to find a middle ground between the two, ultimately taking on long and short term goals reflective of the viable indigenous model.

In my surveys farmers were able to freely respond when asked why they chose to grow certain types of rice, and their responses were categorized into one of six groups: price and marketability; seed and resource accessibility; environmental suitability; personal taste or health related preferences; quality of rice grain; and convenience or habit-related reasons. The results showed no significant differences in any of these motivations between NGO and GO farmers, indicating that motivations are generally equal between groups. As a whole group, 43% of farmers were motivated by reasons related to price and marketability, and 25% were motivated by personal preference for taste or health. These categories exceed the four other response categories,¹⁴ indicating that both groups are equally motivated by price and marketability as the primary factor, and personal preferences secondarily, in their rice-growing decisions.

The motivation rankings reveal that farmers are practical in their decision-making, placing them in the framework of the rational peasant, as they respond best to non-governmental organizations when they find their involvement provides a practical and personal advantage. In

¹⁴ Environmental suitability: 16%, convenience or habit-related reasons: 11.1%, quality of rice grain: 3.7%, and seed and resource accessibility: 1.2%

many cases, farming is the household's main source of income, and so most farmers feel that they cannot commit to an alternative farming practice or seed variety if it doesn't bring direct financial benefits. In terms of personal health, nearly all of the farmers in NGOs explain that they initially joined these groups because chemical farming noticeably has harmed their health, and they wanted support and education in their transition to organic practices. Similarly, a handful of farmers explain that they grow certain native varieties, such as red or yellow rice, because they have health benefits including lower sugar and higher nutrients – making them nutritious and marketable (B. Mahtkao, personal communication, June 15, 2012).

While farmers' practical approach to alternative agriculture places them in the framework of the rational peasant, aspirations for crop biodiversity, resilience, and community food sovereignty – values present in the moral economy – can be found in discussions with NGO representatives. These representatives generally express the importance of farmer autonomy, environmental resilience, and the role of native rice varieties in traditional celebrations. In reference to farmers' ability to choose and own their seed, an NGO community coordinator explains, "We just want to make the people [farmers] understand that these are their resources and they belong to them on their farmland ... That is the most important in long term" (A. Saengubon, personal communication, July 20, 2012). He went on to express that the right to seeds is something that farmers share, and if that is taken away from them, then a part of Thai identity is lost. Furthermore, NGO leaders value keeping a diverse, healthy farm field for confronting environmental changes, in which Ubol, Isaan's policy coordinator for the AAN, states, "we know that if we grow less varieties it might have a huge damage. It is quite risky because every degree that it changes can affect the rice's ability to bloom" (U. Yoowah, personal communication, June 16, 2012). He explains the fear of specializing too much in one crop to

meet market demand – even a native variety – as he is wary of the potential environmental implications it may have in the future. Lastly, NGO leaders also emphasize the importance of keeping around native rice varieties for their use in celebrations and spirituality. In Surin there is a tradition in which

“You lay the local varieties down including sesame, beans, and *Khao Niong Gewung* (native rice). They don’t use Jasmine 105 in this ceremony. So when *Niong Gewung* disappears from the area...people wanted it. It had been lost from the practices and experiences of the villagers...when we brought it back the villagers were excited and they were glad to be growing it” (S. Jangsri, personal communication, June 23, 2012).

Overall, these NGO leaders communicate values beyond basic market needs and farmer practicality, as they discuss the important of alternative agriculture in terms of food sovereignty, environmental sustainability, and maintenance of communal and cultural traditions.

While the NGO leaders talk comfortably about the value of native seed varieties for their environmental resilience and tradition, I was interested to know to what degree farmers share these values, particularly those that are NGO members. To do so, I measured farmers understanding of native rice varieties,¹⁵ the perceived importance of native rice in culture, and practice of traditional methods and ceremonies (Table 3). While every NGO member understood what a native variety was (i.e., could name at least one example), 18% of farmers in governmental organizations could not engage in discussions about native varieties because they did not know that they existed. This significant number of GO members that do not understand the concept of a native variety is the first indicator that there is a positive relationship between NGOs and education about native rice varieties.

¹⁵ In measuring understanding of native varieties, this simply refers to whether or not the farmer knew what a native variety was. Because the government has been promoting mainstream seeds since the mid-20th century, there were instances in which farmers were unable to discuss the role of native varieties, as they did not know they existed.

Survey question	Organization	n	Mean	<i>p</i>
Understands native variety (0 = no, 1 = yes)	GO	22	0.82	
	NGO	29	1	0.042*
Native varieties are important to my culture (Rank 1-5)	GO	24	2.96	
	NGO	29	3.48	0.295
Practice of traditional ceremonies (Rank 1-10)	GO	12	4.83	
	NGO	21	7.29	0.051

Note: Data drawn from an independent t-test. Significance (*p*) is two tailed, equal variances not assumed. An asterisk (*) indicates a statistical significance ($p < 0.05$)

Understanding what a native variety is, however, does not necessarily mean that these farmers consider them to play an important role in their culture. Farmers involved in NGOs did not believe native varieties were important to traditional culture significantly more than those in a GO. There is perhaps the beginning of a significant relationship, as NGO members ranked the cultural importance of native varieties at 3.48 (of 5) while GO members ranked 2.96. As it stands however, the opinions of NGO farmers are across the board. Some excitedly describe, "Having the local varieties helps us keep up with the cultural activities. We need *Khao Jow Deng* (native variety) to make noodles. We need *Khao Gum* (native variety) to make *Khao Thom* (steamed rice treat) and black sticky rice can also be used as medicinal food for healing." In other cases, farmers don't think much of different varieties, explaining, "Our culture is about having a healthy farm and good production and harvest. So whether it is a local variety or a new variety, it is just about rice." Lastly, I find that NGO membership has a marginally significant positive relationship with the practice of traditional ceremonies and rituals related to agriculture, indicating that NGO involvement is related to more frequent practice of, and greater dedication to, the traditional ceremonies of farming. This relationship may reflect a more fundamental trait of Thai farmers, as those more engaged with the spiritual and ritual aspects of farming connect with the values of alternative farming.

Taken together these results indicate that while NGO members are perhaps slightly more focused on native rice, its cultural values, and traditional agricultural practices, the trend is still weak and inconsistent. Particularly when balancing native varieties with market pressures, farmers seem to prioritize the market. In some instances, farmers are bluntly honest about how they prioritize their decisions between cultural and marketable: “I have heard that people who farm the local varieties, they are limited to the local variety cooperative because they have a local market. The local varieties aren’t important if they can make money.” The sentiment that native varieties are only important “if they benefit me” is heard from a wide variety of farmers, reinforcing the motivation results presented earlier. However, some farmers seem a little more disappointed at the reality of the cultural-economic conflict: “*Niung Guang* (native variety) is better but we can’t sell it. If the local varieties could make more money people would turn back to grow these, but we don’t have the market now.” In either case, the role of the market is still the primary motivator for farmers while NGO leaders have visions of values beyond just economic success, as they plan for environmental changes and foster traditional and cultural practices.

Pairing the average farmers’ market-related motivations and tentative cultural engagement with the leader’s insistence on goals of environmental and cultural value, the end result is the placement of Isaan alternative agriculture into the viable indigenous model of development. Proposed by Bebbington (1996) this approach to development holds that farmers will most effectively maintain their cultural identity by embracing the involvement in the global market and using it to their advantage. This way, farmers can be empowered by their new economic success, as well as control some levels of production to provide the greatest benefits for their community, and with those benefits, aim to preserve the cultural space and traditions other than agricultural technologies (Bebbington, 1996; Rigg & Nattapoolwatt, 2001).

In the case of these Isaan NGOs, they value cultural and environmental aspects of food, but recognize that farmers' primarily need to have a viable economic alternative in place. Without a financially stable crop or market, participation would likely dwindle, and so these NGOs promote niche and local markets, and in some cases, are the ones buying the mills and making direct connections to international buyers. These markets can be considered the means to the long-term goals of the NGO, as an AAN coordinator describes, "The *process* goal is that rice can be sold in the market. But the *impact* goal is the ownership – the sense of belonging of these farmers with their seeds, with their varieties" (A. Saengubon, personal communication, July 20, 2012). Said simply enough, NGO leaders want farmers to recognize the value of native seeds, but to get to that point there has to be a market for them. So by taking the global economy into their own hands, NGOs are getting premiums for their farmers, which can be used as a means of providing extra financial incentive for farmers to stay involved in alternative markets, or aid in community projects to help educate about the longer-term goals of environmental human rights. Essentially, NGOs are fitting into the viable indigenous model by providing a practical economic alternative for its member farmers while promoting cultural and environmental values in hopes of empowering its members and engaging them more critically in the food system.

The eventual hope of this viable indigenous model in Isaan is that in time, members will become more aware of the abstract values of the movement, including environmental and cultural benefits. Short-term material benefits paired with the promotion and education of these long-term goals could result in the eventual connection to the more abstract values (Brunt & McCourt, 2012). This compromise is not to say that goals of environmental or cultural sustainability should be forfeited, but rather, that they must be put on balance with securing the farmers' wellbeing, financial and otherwise. In moving forward with this tactic, the hope would

be that one would find an increased number of farmers connecting with the NGO's broader values, and finding motivation in categories of environmental resilience or cultural preference on par with the market. With more members educated and passionate about goals beyond just the market, the NGO networks may begin to make changes that would benefit the greater farming population of Thailand, perhaps in cases such as restricted pesticide importation and labeling, expanded seed promotion and education, and changing the standardization requirement of government mills. In this way, the non-governmental organization can serve as an access point for farmers to transition to organic farming and connect to alternative markets, both of which serve as a means of achieving longer-term goals of sustainability education and policy change.

Based on the understanding of NGOs and its members in terms of cultural values and goal differences, as well as in the context of development frameworks, I would like to emphasize the importance of these distinct development opinions for new NGOs or researchers in the field. To gain and maintain membership, the use of incentives that relate directly to the farmers' needs should be proposed as primary goals. According to my research, health benefits from organic farming, support and education during the organic transition, and opportunities to sell at alternative markets are the strongest motivators for membership in an NGO. This tactic of combining goals of environmental sustainability with practical support for farmers is a balance critical to the success of an NGO. If the organization fails to benefit the farmer, then membership may decline because farmers are not inclined to participate just for the sake of environmental sustainability.

NGO and social movement platform

Having discussed the efficacy of NGO networks and the different motivations and development perspectives between NGO leaders and its member-farmers, I would like to think

more broadly about how these conclusions fit into the context of NGO and social movement literature. I contend that the relative success seen by these Isaan alternative agriculture NGOs comes from its unique relationship with social movements, though it still stands to be analyzed using the same criticisms applied to INGOs. Furthermore, I discuss how this NGO-social movement network fits into the context of old and new social movement theories, representing a unique blend of perspectives and approaches.

The network of local NGOs for alternative agriculture is relatively unique compared to the much of the scholarly literature on non-governmental organizations, as it blends elements of NGOs and social movements. A social movement alone does not have the organization or professional capacity of an NGO, and an NGO alone runs the risk of being out of touch with the grassroots. So these Isaan networks find a middle ground – organizing like an NGO but gaining membership and participation from a larger network like the Assembly of the Poor – ultimately acting as NGO-social movement hybrid networks to engage its members in a successful participatory manner.

But despite the network's differences compared to the popularly criticized INGOs, it is still subject to evaluation with regard to accountability and elitism, as these have yet to be discussed with regard to local and national networks specifically. The first major argument against the effectiveness of INGOs is their upward accountability to donors, which limits local participation and grassroots engagement (Brunt & McCourt, 2012). The Alternative Agriculture Network, its sister and daughter components, and the Natural Agriculture Group, are national and local NGOs, and so I defend that in these cases upward accountability is not a significant influence on the organization's decision-making process. In terms of financial accountability, there seems to be little to no obligations to the financial supporters of the NGOs, as their funding

often comes from domestic foundations with similar goals, or from the NGO members themselves.

Though criticisms of upward accountability have little room in the discussion of these local NGO networks, there is potential for a degree of elitism within these groups. While likely less extreme than in the case of INGOs, there is still a divide in terms of education and involvement between the leaders and members of local NGOs. NGO leaders are often more elite, such that they have higher incomes and a university education. These leaders, along with a few highly involved members, are typically the ones preaching the benefits of organic farming and coordinating outreach efforts for the education of sustainable agriculture, while the average members seem much less involved. However, this distinction between elite and average may be unavoidable, as the network might not be sustainable without the major active and organizational contributions of the academics dedicated to farming issues. Farming is a full-time job, and there are few other options than to have an “elite” of some degree (i.e. not a full-time farmer) take on leadership roles within these NGOs. As the coordinator of Green Net Fair Trade points out, “farmers are not supermen – they cannot do it all” (V. Panyakul, personal communication, July 4, 2012). In this conversation he explains that truly independent movements are unrealistic, and that an effective and sustained movement requires some leaders and partners with specialized and professional skills. Thus, the fact that Isaan’s alternative agriculture organizations borrow characteristics of both NGOs and social movements aids in its viability for maintaining membership and making change.

Accepting this local NGO-social movement hybrid as an imperfect, but much improved model compared to INGOs, I move to think about how these types of groups fit into the frameworks of old and new social movements. To do so, I use the network’s goals and political

engagement to help inform its position as a blend of the two social movement theories.

Alternative agriculture is often perceived by the western world to have some post-material value, and within new social movement theories, goals of local groups are expected to organize strictly from the grassroots and reach beyond material demands (Buechler, 1995). Considering the goals of the network in Isaan, some of the leaders promote values that are less-economically focused (post-material), but for the labor class of a rural region, the primary means by which the NGOs' alternatives have value are to provide a material, direct benefit. With the personal benefit still being prioritized above the post-material, the Isaan farming movement does not fit into this framework of new social movement theories. Rather, these farmers are still struggling with issues of health, financial stability, and lack of empowerment within their class, giving them a long way to go before they address the greater goals of sustainability for sustainability's sake. That being the case, this movement's goals do not fit the mold of the new social movement theory, but rather, are somewhere in between.

Politically, the network takes on qualities of old and new social movements, such that it values both short-term, piecemeal policy changes and longer-term whole scale systematic change. The movements in Thailand have been known to affiliate with political parties and use federal grants to their advantage, aligning themselves with different political groups in order to gain leverage in the political realm (Kitirianlarp & Hewison, 2009). This focus on single issues and engagement with the political structure does not fit within new social movement framework; however, I contend that these policy-level efforts are a part of longer-term goals for systematic change. Much like the NGOs using markets as a means for longer terms goals of environmental human rights, this movement sees immediate benefits in acting politically, which may help fuel their movement to a point where it can achieve systematic changes.

Again, however, I find that the opinions of the leaders and members differ, this time on their stance over political engagement. The network leaders aim for both small scale and large-scale political change, but the political opinion of the member farmers is less deliberate, and sometimes non-existent. The NGO aims to work with the government to initiate policy changes, and also involves members in protests and movements to rally attention towards political issues. However, not every farmer considers this a political movement. Thinking back to my first home stay in Yasothon province, I found that for many members of the alternative agriculture community, organic farming is less of a political statement than it is a movement towards a more unified and supportive community. The insecurity of Thailand's politics, in combination with the threat of political imprisonment in relation to *lèse-majesté* laws often leads many to feel disconnected from the government, resulting in either faithlessness in policy-based solutions or hesitation in engaging with politics directly. When my host mother described her motivations for protesting chemical import policies – an act that would seem politically charged – she explained, “I went to protest to protect our village. It's not about political things” (P. Phanloed, personal communication, September 21, 2011). It is hard to determine whether or not this sentiment is one of political disinterest, fear for political defamation, or a meta-political tactic of a new social movement. There seems to be political *engagement*, but the reasoning or objective behind that engagement is unclear. In either case, the farmers seem to prioritize a sense of community and support resulting from their political behavior, and don't directly link that to policy or systematic change, while the network leaders directly take on both short and long terms efforts for making political change

Ultimately, the agricultural social movement in Isaan is a unique network that finds a middle ground between old and new social movements. And while there are differing opinions

with regard to the exact nature of the movement (new or old), it may in fact be these differences that make this network effective, as it plays on the strengths and needs of each group. It utilizes the organization qualities of NGOs, the grassroots rallying of social movements, and reconciles the short-term, practical needs of its members while its leaders don't lose sight of the long-term, larger ideals.

Understanding network organization is especially critical for researchers or INGOs working in the area, as much of the western world's discussion about alternative agricultural movements is framed mostly in terms of new social movements. The consumer-based alternative food movements have progressed to a point that their goals are less materially based and more focused on values of environmental sustainability and farmers' rights (Constance, 2008), which may encourage a misunderstanding of Thai farmers' reality. In Isaan, farmers of the alternative agriculture movement should not be mistaken for cultural activists in a post-capitalist society. Rather, the farmers are trying to stabilize their health and finances before potentially moving towards goals of cultural and environmental resilience. Furthermore, the locally established NGOs are not merely seeking access to European fair trade outlets and their premiums, but instead, are trying to strike a balance between the practicality of farmers and the efforts towards the sustainability of their local environment and culture. International actors should be aware of these aims to ensure that they are not imposing expectations of western agricultural social movements in a context where farmers' goals are much more practical. Moreover, external organizations looking to work in Isaan, or generally any region with a strong cultural identity and low level of INGO influence, should aim to develop a deep understanding of the local concerns, agricultural history, and cultural traditions so to be able to fully understand the farmers' priorities on balance with larger goals of sustainability.

NGO-government involvement and unaffiliated farmers

While the primary focus of my research was to compare the role of non-governmental organizations with governmental organizations in their efforts to facilitate alternative farming practices and values, two outlying categories of farmers – those in an NGO derived from government policy, and those unaffiliated from any group – emerged in my sample. Both NGO-governmental groups and unaffiliated farmers have elements of their practices and values that are significantly different compared to NGO farmers, and so the preliminary results of these groups are interesting to consider with regard to future research.

In thinking about the leadership and member engagement in NGOs, the topic of government involvement is relevant for thinking about its role in member mobilization, as well as its ability to assisting NGOs through policy change (Moore, 2001). At the same time, the role of the government with NGOs arouses criticisms of upward accountability, such that the non-governmental organization runs the risk of becoming a mere government extension, being accountable only to them and therefore reducing participation and engagement with local issues (Bendaña, 2006; Bebbington & Farrington, 1993). Based on these literary discussions, I was interested to know whether or not government involvement plays a significant role – either positive or detrimental – to the group involvement, practices, or values of NGOs in my case study.

In my research, the Sai Na Wang organic group in Kalasin province is an exceptional and unique organization, such that its establishment was largely facilitated by the governmental initiatives of a social activist turned local governmental official. I used this small sample against other NGOs to analyze what role the government has on my agricultural metrics. When compared to other non-governmental networks, there are few differences between the two groups

in terms of growing habits and rice-related values, as both grew similar numbers of native varieties on similar amounts of land, as well as placed the same relative importance on native varieties (Table 4).

Survey questions	Organization	n	Mean	<i>p</i>
Land area with native varieties (%)	NGO	22	16.73	
	Sai Na Wang	9	27.11	0.277
Number of native varieties grown	NGO	22	0.64	
	Sai Na Wang	9	1.67	0.124
Native varieties are important to grow (Rank 1-5)	NGO	21	3.48	
	Sai Na Wang	6	3.33	0.902
Market growing motive (0 = no, 1 = yes)	NGO	22	0.55	
	Sai Na Wang	9	0.11	0.010*
Native varieties are important to my culture (Rank 1-5)	NGO	22	3.68	
	Sai Na Wang	9	2.22	0.149
Practice of traditional ceremonies (Rank 1-10)	NGO	14	6.21	
	Sai Na Wang	8	9.5	0.006*

Note: Data drawn from an independent t-test. Significance (*p*) is two tailed, equal variances not assumed. An asterisk (*) indicates a statistical significance ($p < 0.05$)

The major differences are that Sai Na Wang farmers are significantly less motivated by the market and have a significantly stronger relationship in their practice of traditional agricultural ceremonies. While I cannot certainly explain the exceptional motivation and cultural engagement by government-NGOs, I would contend that strong government support, particularly local government policy, gives NGOs an advantage in terms of resources and educational networks. The local government was able to provide the farmers with funding for resources such as mills and seeds, and also facilitate a variety of workshops to educate farmers about seeds in a formal, government-supported style. It is likely that farmers are motivated by factors other than price and marketability if they are educated about other benefits, particularly those of environmental resilience through diversity. However, the small sample from Sai Na Wang ($n=8$) may be responsible for the marked significance between the two variables as well.

Though Sai Na Wang is certainly the most unique NGO-governmental case, pairing with governmental organizations is not exclusive to this community, as both the Alternative Agriculture Network and the Natural Agriculture Group have or are currently working towards government relationships in the advanced stages of their organization. The Yasothon AAN has established a relationship with the regional Agricultural Land Reform Office (ALRO), which supports education about organic farming, has coordinated with the AAN on initiatives like the Farmer Field School, as well as helped them find market access. The Field School is teaching organic and alternative methods to youth, which shows the local government's support for teaching organic methods. Furthermore, a leader explains, "The ALRO officers and their friends – they are like sales representatives. Sometimes they order [rice] themselves and distribute by themselves in Bangkok" (B. Mahtkao, personal communication, June 15, 2012). However, a positive government relationship seems to depend on the level of government, as well as the given community.

Generally, NGO leaders believe that having a relationship between themselves and their local government can facilitate network development, as it lessens some of the challenges NGOs face regarding information dissemination and policy support. Furthermore, making change occur at an institutional level may enhance the movement's prospects to become more sustainable; as an NGO representative explains, "If we worked only with these people [farmers] we would be very limited [in our impact]. Right now the farmers are getting old and weak. People have limited time, they have to deal with family, they have to farm... So we try to push it at the *tambon* [local government] level. We try to make it appear at local policy formation" (A. Saengubon, personal communication, July 20, 2012). The constant fight against convention can be taxing on farmers, but institutional changes could help relieve some of the roadblocks that

alternative agriculture confronts, such as limited funding and government promotion of pesticides. So though the relationship can be contentious, it may be beneficial for Isaan NGOs to carefully utilize the help of government offices in an effort to advance their goals. However, I would propose that further research would need to be conducted to understand the depth of government commitment to alternative farming and their ability to make policy change in and beyond the local level.

After analyzing the differences between non-governmental farmers and farmers in an outlying NGO-governmental farming group, another outlier to consider is the group of farmers unaffiliated with any network. I compare unaffiliated farmers to those in NGOs, to generally find that the two groups have similar practices and values pertaining to native varieties (Table 5).

Survey Question	Organization	n	Mean	<i>p</i>
Number of native varieties grown	Unaffiliated	14	.64	0.491
	NGO	29	.86	
Land area with native varieties (%)	Unaffiliated	14	39.21	0.165
	NGO	29	21.07	
Native varieties are important to grow (Rank 1-5)	Unaffiliated	14	4.21	0.227
	NGO	26	3.58	
Market growing motive (0 = no, 1 = yes)	Unaffiliated	14	.14	0.030*
	NGO	29	.45	
Native varieties are important to my culture (Rank 1-5)	Unaffiliated	14	3.50	0.976
	NGO	29	3.48	

Note: Data drawn from an independent t-test. Significance (*p*) is two tailed, equal variances not assumed. An asterisk (*) indicates a statistical significance ($p < 0.05$)

There is no significant difference between NGO and unaffiliated farmers' number of local varieties grown, the amount of land on which they grow native varieties, the perceived

importance of local values in growing or in culture.¹⁶ The only significant relationship is that those unaffiliated with networks are less market driven in their rice growing decisions than those involved strictly in NGOs, with 14% of unaffiliated farmers focusing on market priorities, while 45% of NGO members were market-motivated. This finding reveals that the lack of involvement with a formal network may actually reduce the pressure to grow just for the sake of the market, or that those disinterested in their market options are not apt to join any network. Though this group was not the focus of my research, it opens up questions about the nature of unaffiliated farmers and their growing motivations, and the influence of agricultural organizations as a whole for future research.

¹⁶ The practice of traditional ceremonies related to agriculture could not be measured for this analysis, as there was not complete enough data for the unaffiliated farmers.

Conclusion

Recommendations for future research

Taking on the task of understanding the organization of various NGOs, their relationship to the commodity pathway of native rice, and the divergence of perspectives between NGO leaders and member farmers, certain topics emerged that could serve as future research questions. The first of the future research possibilities pertains to unaffiliated farmers, as these groups are largely unexplored, and would contribute to a holistic understanding of Thai agricultural communities and movements. While my research focused particularly in the role of organizational involvement, it seems as if no involvement may be equally interesting in terms of alternative agriculture. These types of farmers are not deliberately alternative, but they do not engage with the government, and so their opinions of conventional agriculture would be valuable to explore. I would expect to find that these groups do have alternative motivations, but are not involved in alternative networks because they have a niche in some sort of community network, which facilitates their farming needs such as seeds, labor, and knowledge sharing without any formal structure. However, the complication in this potential study may be finding these networks, as their lack of affiliation makes their contact much more ambiguous than those involved in NGOs or GOs.

Similarly, additional research on the other outlier of my research, the NGO-governmental groups, would be worthwhile. Just as unaffiliated farmers shed light on the capacity of communities with informal networks to foster values of alternative farming and cultural practices, the government has the capacity to do the same in a more formal way. Thus further exploration of these NGO-governmental groups, possibly even in comparison to unaffiliated relationships, would help inform future practitioners as to whether the unofficial (unaffiliated),

moderately official (NGO), or of hyper-official (NGO-GO) organizational methods are more effective at engaging farmers in alternative agriculture.

A third possible research question involves the process of information dissemination among networks. During my studies I found that one of the major issues in NGOs was that farmers did not know much about certain farming practices, or where to get seeds. Even those in NGOs often sounded as if they knew very little about the values, goals, or information promoted by their very own network. When surveying a woman selling at the AAN's green market, I was surprised to find that she did not know what native seed varieties were, what they could be used for, or where to get the seeds. However, her neighboring stalls were selling them and discussing their value, leading me to question what sort of communication channels are set up within the network. On the other hand, a significant number of farmers that I interviewed boasted about the health benefits of native rice, and the drawbacks of Sticky rice 6 for its high sugar content causing diabetes. This knowledge was so common, while knowledge of native seeds was not, generating an interest in how ideas and values are shared. Thus, researching these networks with regard to network theory and understanding how information is transferred would be helpful for NGOs and scholars, as it could aid in the long-term goals of spreading understanding and encouraging goals of native varieties propagation.

Lastly, the research I have conducted can only show correlations between variables, and my interviews and immersion can only get me so far in considering causation. As such, a future study to consider would be to this research in a time-lapse study, potentially five and ten years from now. Surveying farmers' opinions on rice values, practices, and understandings over time would allow me to determine whether or not farmers are changing in these respects. I would predict that they would improve, as I align with the hope of the NGO leaders that pairing short

term economic benefits with education for long term values such as cultural practices and environmental understanding would allow farmers to expand their understanding of farming beyond a mere market priority.

Additional factors of interest

In order to have a comprehensive understanding of the alternative agriculture movement, both in this paper as well as for future research, it is important to be aware of related factors that problematize farming dynamics in Isaan. I briefly address these factors – climate change, youth migration, and land rights – so to inform future practitioners of potential conflicts and concerns within Isaan communities. During the fall of 2011, Thailand experienced unprecedented amounts of rain and flooding, greatly impacting the lives of all Thais – urban and rural – and particularly damaging the rice crop (Javier & Suwannakij, 2011). Extreme weather events such as these are becoming more and more common, whether it be more rain in the rainy season or drought in the dry season, farmers are only beginning to confront obstacles of climate change they have not yet had to deal with before. Traditionally, farmers use environmental cues to track the weather. Isaan AAN President, Bunsong, explains, “I still believe and observe the natural signals,” showing us how a blade of grass can track precipitation. “Sambanga grass – the type of grass that will keep track [of rain]. We still believe and observe the ants, if they bring their eggs into the house it is for sure we will have a big rain” (B. Mahtkao, personal communication, June 15, 2012). However, conversations with farmers revealed that the climate has changed so much recently that these methods no longer work. The traditional agricultural system as Isaan knows it is beginning to change, which may add a confounding factor to the alternative movement, and agriculture as a whole.

Leaders of the alternative agriculture NGOs are feeling pressure to adapt to the changing climate by using native seeds, but also become more vulnerable as traditional farming begins to fail them. In a more extreme case, some leaders shared that they have begun to cultivate and save varieties of potatoes, which in worst-case-environmental-scenarios, maybe begin to replace the rice crop. Leaders explain that they are “studying root vegetables (local varieties) on a model plot, that farmers in the past ate instead of rice – for example *Gloi Peum* (native potatoes) are resistant to the dry season” (D. Puhtpon, personal communication, June 15, 2012). Ultimately, this turn in climate is causing farmers to consider older vegetables for subsistence; potentially changing’s the trajectory of alternative agriculture.

Beyond a changing climate, the changing demographics and modern culture also have adverse effects on the alternative agriculture movement. Despite the strength of the current networks, there is a great deal of concern about the dwindling population of youth in farming, and in the increasing age of the average rice farmer. One NGO representative explains, “The youth go to school and after school they go into the industrial world... where seed farming is a job that they are not proud of.” With rural brain drain to urban areas for school and jobs, the farming population may have no choice but to sell out to industrial agriculture conglomerates. Many of the NGOs have initiatives to try and keep youth interested in farming, but the success of these organizations is hard to measure. Farmer Field Schools, which teach youth the importance of farming, show some promise – though even that attendance is low. Referring to the school one farmer explained, “we want to show them (youth) that this is a job that they can do. It is not a job that they should look over or look down at. It is a job that can give you food security. We might not have a lot of money but we have food, freedom, and liberty. So we would like to have future youth, so we tell them how it’s secure and happy and interesting” (I. Pakphum, personal

communication, June 22, 2012). Ultimately, the alternative movement may all be for naught if there isn't a generation to follow.

Lastly, issues of land rights also divert attention away from efforts towards sustainable agriculture. The community of Baw Kaew, for example, has spent years collecting seeds for a community seed bank, and has high hopes of establishing a community plot to grow native seeds. However, the community has made little progress in their sustainable farming methods because they were evicted from their land in 1973 by the government wanting to use their land to plant eucalyptus trees for the paper industry. This is not an uncommon event, as land tenure is hard to provide for old established communities, allowing the government to strip it away when they desire. As such, this community now lives illegally on their land and confronts struggles against the government. When visiting the community during my research, little could be discussed in terms of agriculture because two of the community's leaders had recently been arrested. It is injustices like these that make it hard for a community to look forward in their development, and attention should be paid to issues such as these before considering the capacity for an alternative movement.

Conclusion

The findings presented in this paper draw novel analyses with regard to NGOs and alternative agriculture in Isaan. Alternative agriculture in Isaan is unique to the NGO and social movement literature, as their network combines elements of both to create a successful hybrid, with the organization of an NGO and the participation of a social movement. Overall, this network for alternative agriculture is an effective means of providing and promoting growing sustainable practices and values, particularly with regard to native seed varieties. There is still a disconnect, however, between the motivations and values NGO members and leaders. Average

member farmers are generally just as market motivated by farmers in governmental organizations, and do not place the same value on native seed varieties for their role in culture or environment as the leaders do. However, NGO leaders are facilitating education for farmers so to try and lessen that gap, with the hope their education, in combination with providing viable market options for native seed varieties, will move farmers towards opinions more concerned with environmental human rights.

References

- (AAN) Alternative Agriculture Network Isaan, Khok Pak Good-Pong Daeng Farmers Network, Thai Baan Association, Mahasarakam Hospital Chemical-Free Market Network, Mahasarakam Green People Network, Isaan Contracted Farmers Network, Isaan Thai Farmers Networks Association, Isaan 'Noat' Sustainable Agriculture Local Research Network, Mahasarakam Health Promotion Network, Mahasarakam Green Market Network, Man Yuen Network, Organic Group of Nong Paen Sub-District, Yang Ta Lad District, Kalasin Province, Isaan Farmers Generation Network, Isaan Young People Group. (2011). "Open Letter to Prime Minister Yingluck Chinawatra" presented at Organic Farmer Protest, September 20, 2011.
- Allen, P. & Kovach, M. (2000). The capitalist composition of organic: The potential of markets in fulfilling the promise of organic agriculture. *Agriculture and Human Values* 17, 221-232.
- Amnard, S., Somchai, K., Suparb, B., Varunee, V., Patcharee, T., & Sirichai, S. (1996). Effect of nitrogen fertilizer on quality of KDML 105 rice cultivar. *Kasetsart Journal* 30, 458-474.
- Avery, A. (2007). 'Organic abundance' report: fatally flawed. *Renewable Agriculture and Food Systems* 22(4), 321-323.
- Badgley, C., Moghtadera, J., Quintero, E., Zakema, E., Chappell, M.J., Avilés-Vázquez, K., Samulona, A., & Perfecto, I. (2007). Organic agriculture and the global food supply. *Renewable Agriculture and Food Systems* 22(2), 86-108.
- Baker, C., & Phongpaichit, P. (2005). *A History of Thailand*. Cambridge and New York: Cambridge University Press.
- Bendaña, A. (2006). NGOs and Social Movements: A North/South Divide? Civil Society and Social Movements. Program Paper Number 22. United Nations Research Institute for Social Development. Retrieved from [http://www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/4F7CC72852DD23EBC12571D1002B45AD/\\$file/Bendana.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/4F7CC72852DD23EBC12571D1002B45AD/$file/Bendana.pdf)
- Barratt-Brown, M. (2003). *Fair Trade: Reform and Realities in the International Trading System*. Atlantic Avenue, NJ: Zed Books.
- Bebbington, A. (1996). Movements, modernization, and markets: Indigenous organizations and agrarian strategies in Ecuador. In R. Peet & M. Watts (Eds.), *Liberation Ecologies: Environment, Development and Social Movements* (86-109). London: Routledge.
- Bebbington, A. (2007). Of Texts and Practices: Empowerment and Organisational Cultures in World Bank-funded Rural Development Programmes. *Journal of Development Studies* 43, 597-621.
- Bebbington, A., & Farrington, J. (1993). Governments, NGOs, and Agricultural Development: Perspectives on Changing Inter-Organisational Relationships. *The Journal of Development Studies* 29(2), 199-219.
- Bebbington, A.J., Hickey, S., & Mitlin, D.C. (2008). *Can NGOs Make a Difference? The change of development alternatives*. London and New York: Zed Books.
- Bello, W. (2008, June 2). Manufacturing a Food Crisis: World Bank and IMF destroying Third World agriculture. The Nation. Retrieved from <http://www.thenation.com/article/manufacturing-food-crisis>
- Bourdieu, P. (2003) *Firing Back: Against the Tyranny of the Market* 2. London: Verso.
- Brandt, K. (1986). New Social Movements as a Metapolitical Challenge: The Social and Political Impact of a New Historical Type of Protest. *Thesis Eleven* 15, 60-68.

- Brunt, C., & McCourt, W. (2012). Do International Non-governmental Organizations walk the talk? Reconciling the 'two participations' in international development. *Journal of International Development* 24, 585-601.
- Buechler, S.M. (1995). New Social Movement Theories. *The Sociological Quarterly* 36(3), 441-464.
- Burros, M. (1999, February 17). Eating Well; Anti-Organic, And Flawed. The New York Times. Retrieved from <http://www.nytimes.com/1999/02/17/dining/eating-well-anti-organic-and-flawed.html>
- Calhoun, C. (1993). 'New Social Movements' of the Early Nineteenth Century. *Social Science History* 17, 385-427.
- Castells, M. (1983). *The City and the Grassroots: A Cross-cultural Theory of Urban Social Movements*. Berkeley: University of California Press.
- Central Intelligence Agency. (1974). Ethnic Groups from Thailand. Accessed from <http://www.lib.utexas.edu/maps/thailand.html>
- Chambers, P. (2010). Thailand on the Brink: Resurgent Military, Eroded Democracy. *Asian Survey* 50, 835-858.
- Chappell, M.J. & LaValle, L.A. (2011). Food security and biodiversity: can we have both? An agroecological analysis. *Agriculture and Human Values* 28, 3-26.
- Constance, D. H. (2008). The emancipatory question: the next step in the sociology of agrifood systems? *Agriculture and Human Values* 25, 151-155.
- Dalton, R. J., Kuechler, M., & Burklin, W. (1990). The Challenge of the New Movements. In R.J. Dalton & M. Kuechler (Eds.), *Challenging the Political Order*. New York: Oxford University Press.
- Dixon, J. (1999). A cultural economy model for studying food systems. *Agriculture and Human Values* 16, 151-160.
- DuPuis, E. M., & Gillon, S. (2009). Alternative modes of governance: organic as civic engagement. *Agriculture and Human Values* 26, 43-56.
- Earle, L. (2004). Social Movements and NGOs: A Preliminary Investigation. International NGO Training and Research Center. Policy Briefing Paper 15. Retrieved from <http://www.intrac.org/data/files/resources/303/Briefing%20Paper%2015%20-%20INGOs%20and%20indigenous%20social%20movements.pdf>
- Ebrahim, A. (2001). NGO Behavior and Development Discourse: Cases From Western India. *International Journal of Voluntary and Nonprofit Organizations* 12, 79-101.
- Edelman, M. (2005). Bringing the Moral Economy back in ... to the Study of 21st-Century Transnational Peasant Movements. *American Anthropologist* 107, 331-345.
- Ekasingh, B., Sungkapitux, C., Kitchaicharoen, J., & Suebpongsang, P. (2007). Competitive Commercial Agriculture in the Northeast of Thailand. Department of Agricultural Economics and the Multiple Cropping Center, Faculty of Agriculture, Chiang Mai University.
- Emsley, J. (2001). Enriching the earth: Fritz Haber, Carl Bosch, and the transformation of world food. *Nature* 410, 633-634.
- Feeny, D. (2003). The Political Economy of Regional Inequality: The Northeast of Thailand 1800-2000. *Crossroads: An Interdisciplinary Journal of Southeast Asian Studies* 17, 29-59.

- Food and Agriculture Organization of the United Nations. (1996). The Rome Declaration on World Food Security and World Food Summit Plan of Action. Retrieved from <http://www.fao.org/docrep/003/w3613e/w3613e00.htm>.
- Forsyth, T. (2007). Are Environmental Social Movements Socially Exclusive? An Historical Study from Thailand. *World Development* 35, 2110-2130.
- Fresco, L.O. (2003). 'Which road do we take?' Harnessing genetic resources and making use of life sciences, a new contract for sustainable agriculture. In EU Discussion Forum "Towards Sustainable Agriculture for Developing Countries: Options from Life Sciences and Biotechnologies." Retrieved from <http://www.fao.org/ag/magazine/0305sp1.htm>
- Fridell, G. (2006). Fair Trade and Neoliberalism: Assessing Emerging Perspectives. Latin American Perspectives. *Migration, the Global Economy, and Latin American Cities* 33, 8-28.
- Friedland, W. H. (1984). Commodity Systems Analysis: An Approach to the Sociology of Agriculture. In H.K. Schwarzweller (Ed.), *Research in Rural Sociology and Development: A Research Annual* (221-235). Greenwich, Connecticut: JAI Press.
- Friedland, William H. 2001. Reprise on commodity systems methodology. *International Journal of Sociology of Agriculture and Food* 9: 82-103.
- Golomb, L. (1976). The Origin, Spread and Persistence of Glutinous Rice as a Staple Crop in Mainland Southeast Asia. *Journal of Southeast Asian Studies* 7, 1-15.
- Hewison, K. (2000). Resisting globalization: a study of localism in Thailand. *The Pacific Review* 13(2), 279-96.
- Hewison, K. (2010). Thaksin Shinawatra and the reshaping of Thai politics. *Contemporary Politics* 16, 119-133.
- Hookway, J. (2012, November 23). Bangkok Braces for Renewed Political Protests. Wall Street Journal. Retrieved from <http://online.wsj.com/article/SB10001424127887324352004578134581768219170.html?KEYWORDS=hookway+bangkok+protests>
- Ikemoto, Y. (1991). *Income Distribution in Thailand: Its Changes, Causes, and Structure*. Tokyo: Institute of Developing Economies.
- International Crisis Group. (2010). Bridging Thailand's Deep Divide. Asia Report N°192. Retrieved from http://www.crisisgroup.org/~media/Files/asia/south-east-asia/thailand/192_Bridging%20Thailands%20Deep%20Divide.pdf
- International Monetary Fund. (2012). Thailand: Article IV Consultation. Retrieved from www.imf.org/external/pubs/ft/scr/2012/cr12124.pdf.
- ISC-FFS (International Steering Committee of the Forum for Food Sovereignty). (2003). What is food sovereignty? Retrieved from <http://www.nyeleni2007.org/spip.php?article87>
- Javier, L.A., & Suwannakij, S. (October 26, 2011). Floods Ruining 14% of Thai Rice May Erase Global Export Glut: Commodities. Bloomberg. Retrieved from <http://www.bloomberg.com/news/2011-10-25/floods-ruining-14-of-thai-rice-may-erase-global-export-glut-commodities.html>
- Kirner, L., & Kratochvil, R. (2006). The role of farm size in the sustainability of dairy farming in Austria: An empirical approach based on farm accounting data. *Journal of Sustainable Agriculture* 28, 105-124.
- Kitirianglarp, K. & Hewison, K. (2009). Social movements and political opposition in contemporary Thailand. *The Pacific Review* 22, 451-477.

- Kusanthia, A., & Piyasilp, A. (2010). Local Rice Genetic-diversity in Northeastern Thailand. Thailand Land Reform Network. Retrieved from http://www.landreformthai.net/index.php?option=com_content&view=article&id=78:local-rice-genetic-diversity-in-northeastern-Thailand&catid=95:article&Itemid=9
- La Via Campesina. (n.d.). What is La Via Campesina? La Via Campesina. Retrieved from <http://viacampesina.org/en/>
- Lefferts, L. (2005). Sticky Rice, Fermented Fish, and the Course of a Kingdom: The Politics of Food in Northeast Thailand. *Asian Studies Review* 29, 247-258.
- Lyson, T. (2004). *Civic agriculture: Reconnecting farm, food, and community*. Medford, MA: Tufts University Press.
- Melucci, A. (1989). Nomads of the Present: Social Movements and Individual Needs in Contemporary Society. In J. Keane & P. Mier (Eds.). Philadelphia, PA: Temple University Press.
- Missingham, B. (2003). Forging Solidarity and identity in the Assembly of the Poor: from local struggles to a national social movements in Thailand. *Asian Studies Review* 27, 317-340.
- Monsanto. (n.d.). Why does agriculture need to be improved? Monsanto. Retrieved from <http://www.monsanto.com/improvingagriculture/Pages/why-does-agriculture-need-to-be-improved.aspx>
- Moore, M. (2001). Empowerment at last? *Journal of International Development* 13, 321-329.
- National Economic and Social Development Plan. (2011). Summary of the Eleventh National Economic and Social Development Plan (2012-2016). Retrieved from <http://www.nesdb.go.th/Portals/0/news/academic/Executive%20Summary%20of%2011th%20Plan.pdf>
- National Statistics Office. (2003). Agricultural census Northeastern region. National Statistics Office. Bangkok (in Thai).
- National Statistical Office. (2010). Population and Housing Census, Executive Summary. Retrieved from <http://popcensus.nso.go.th/file/popcensus-08-08-55-T.pdf>
- Office of the Royal Development Board Projects. (2009). Principles of His Majesty's Work and Sufficiency Economy Royal Initiative. Retrieved from <http://www.rdpb.go.th/RDPB/Default.aspx>.
- Oupkaew, P. (2011). Complexity and adaptability of a traditional agricultural system: case study of a gall midge resistant rice landrace from northern Thailand. *Genetic Resources and Crop Evolution* 58, 361-372.
- Panyakul, V. (2003). Thai rice: the rice of freedom, A report commissioned by Green Peace Southeast Asia. Green Net, Thailand.
- Pesticide Action Network. (2012). "Big 6" Pesticide Corporations Top the List of Food Labeling Opponents. Retrieved from <http://www.panna.org/big-6/press-release/big-6-pesticide-corporations-top-list-food-labeling-opponents>
- Pitiphunpong, S., & Suwannaporn, P. (2009). Physicochemical properties of KDML 105 rice cultivar from different cultivated locations in Thailand. *Journal of the Science of Food and Agriculture* 89, 2186-2190.
- Plotke, D. (1990). What's So New about New Social Movements? *Socialist Review* 20, 81-102.
- Popkin, S. L. (1979). *The Rational Peasant: The Political Economy of Rural Society in Vietnam*. California: University of California Press.

- Raynolds, L. (2000). Re-embedding global agriculture: The international organic and fair trade movements. *Agriculture and Human Values* 17, 297-309.
- Rigg, J., & Nattapoolwatt, S. (2001). Embracing the Global in Thailand: Activism and Pragmatism in an Era of Deagrarianization. *World Development* 29, 945-960.
- Roy, A. (2004). Tide? Or Ivory Snow? Public Power in the Age of Empire. Speech, San Francisco, California. Retrieved from www.democracynow.org/static/Arundhati_Trans.shtml
- Scott, C. J. (1976). *The Moral Economy of the Peasant: Rebellions and Subsistence in Southeast Asia*. New Haven: Yale University Press.
- Slow Food USA. (n.d.). What is Slow Food. Accessed from http://www.slowfoodusa.org/index.php/slow_food/
- Stauber, J., & Rampton, S. (2001). *Trust Us, We're Experts: How Industry Manipulates Science and Gambles with Your Future*. New York: Penguin Putnam.
- Tipraqsa, P., Craswell, E.T., Noble, A.D., & Schmidt-Vogt, D. (2007). Resource integration for multiple benefits: Multifunctionality of integrated farming systems in Northeast Thailand. *Agricultural Systems* 94, 694-703.
- Tiranti, B., & Negri, V. (2007). Selective microenvironmental effects play a role in shaping genetic diversity and structure in a *Phaseolus vulgaris* L. landrace: implications for on-farm conservation. *Molecular Ecology* 16, 4942-4955.
- Touraine, A. (1985). An Introduction to the Study of Social Movements. *Social Research* 52, 749-787.
- Unger, D. (2009). Sufficiency Economy and the Bourgeois Virtues. *Asian Affairs: An America Review* 36, 139-156.
- United Nations. (2004). "Glossary." In *We the Peoples: Civil Society, the United Nations and Global Governance*. Report of the Panel of Eminent Persons on United Nations–Civil Society Relations. A/58/817. United Nations General Assembly, 58th session, Agenda item 59, Strengthening of the United Nations System, 11 June. United Nations, New York.
- United Nations. (2010). *Country Profile: Thailand Trade Profile*. Retrieved from <http://data.un.org/CountryProfile.aspx?crName=THAILAND#Environment>
- United States Department of Agriculture Foreign Agricultural Service. (2013). *Grain: World Markets and Trade*. Retrieved from <http://www.fas.usda.gov/psdonline/circulars/grain.pdf>

Appendix A IRB Approved Consent Forms

Consent to Participate in Research

I am doing research and would like your to help. My name is Liza Wood and this research is with Dr. Helen Delfeld in at the College of Charleston, and it looks at agriculture in the northeast region of Thailand. I would like you to participate in this interview so I can understand more about rice and rice production.

You will be asked to answer the questions, and I will audiotape you. It will take about 30-45 minutes.

I will keep your information confidential. However, if you would allow me to quote you in the report of my research, please check the item just above the signature line. The audio tape will be destroyed after I finish listening to it.

This research is expected to help the region by showing what rice production does to local culture. I know of no risk of this research.

Participation is your decision, and you may stop at any time.

If you have any questions about this research study please contact Liza Wood at bewood@g.cofc.edu or my faculty advisor at delfeldh@cofc.edu. You may also talk to Research Protections & Compliance on the Office of Research and Grants Administration, at 843-953-7421 or e-mail compliance@cofc.edu if you have questions about research review at the College of Charleston. You will be given a copy of this form to keep.

This research study has been approved by College of Charleston Institutional Review Board for the Protection of Human Research Participants.

I have read this form, and I agree to participate in this research study.

In any reports result from this research, I permit you to quote me
 no yes

 Printed Name of Participant

 Signature of Participant

 Date

 Signature of Person Obtaining Consent

 Date

Consent to participate in research

I am doing research and would like your to help. This research is with Dr. Helen Delfeld in at the College of Charleston, and it looks at agriculture in the northeast region of Thailand. I would like you to participate in this survey so I can understand more about rice and rice production.

You will be asked to answer the questions, and it will take about 20 minutes.

This research is expected to help the region by showing what rice production does to local culture. I know of no risk of this research.

Participation is your decision, and you may stop at any time. Completing the survey means that you agree to participate in this research. All data will be anonymous. Please do not provide any information that could identify you personally.

This research study has been reviewed by the Human Research Protection Program at the College of Charleston. For information about the review process, please talk to the Office of Research and Grants Administration, compliance@cofc.edu or 843-953-7421.

This research study has been approved by College of Charleston Institutional Review Board for the Protection of Human Research Participants.

Appendix B
Farmer field survey

Location:
Province

Date:
Time:

Village:
District
Subdistrict:

Name:
Gender:
Age:
Education
Rai:

Are you part of an organization of farmers? [specify BAAC, government co-op, organic farmers, NGO, community co-op]

Do you grow organically, without chemical fertilizers or pesticides at all? [organic?]

How many people work on your farm regularly?

Do you broadcast or transplant?

Do you hire labor during harvest? [specify how many]

Do you use an automatic harvesting machine?

Do you have a water source other than rain fall?

Of the food you eat in your home, what percent of it comes from your own farm?

What types of rice do you eat inside your home?

What varieties of rice do you grow? How many rai of each?

Varieties

Number of rai

Why do you choose to grow these varieties? [free response, mark]

Reason

Rank

Price

Suited to climate

Suited to soil

Access to seeds

Only have a little land

It's a popular variety

Health/nutrition

High yields

Taste

Afford seeds

Mill will accept these varieties

Did you plant the same varieties last season?

Where are your seeds from? [specify government, farm group, family, community, or convention/exchange]

How often do you buy seeds?

What type of rice do you think is the highest quality and why?

What mill do you sell your rice to? [specify all types!]

Are you apart of the price negotiation? [fair trade?]

If you sell varieties other than Hom Mali 105 and Gaw Kaw 6 and 15, what price do you get per kilogram?

Have climate hazards affected your rice crop negatively?

If yes, what climate hazards?

How have these affected your rice crop?

Have you noticed a trend of continuous trend a climate changes over the past 5 years?

If yes, what trends?

Have you taken action to prevent the effects on climate of your rice crop?

If yes, please explain what action you have taken

Have you made plans for future prevention?

If yes, please explain what plans you have made

Have you considered planting different rice varieties based on climate affects?

Please give two example of a native seed variety

Do you think it is important to grow native seed varieties? [not important, sort of, important]

Do you think native rice varieties are important to your culture and religion?

Do you consider your culture to reflect the culture of Laos?

Do you consider your culture to reflect the culture of Khmer?

Do you think the country's development in agriculture (tractors, pesticides, etc.) is good for Thailand?

Are your religious values and practices the same or different from your parents and grandparents?

Do you partake in the same traditional ceremonies that your parents have participated in?

Do you practice planting, plowing, and harvesting rituals throughout the rice season?

Do you have a celebration on the 11th Buddhist month "Boon Khao Ok Phan-sa" in which you bring alms to the temple?

If yes, what types of rice do you bring?

Does your community practice the Buddhist ceremony, "Boon Koom Khao Yai" where rice is collected in the middle of the community and sold to the poor?

Do you take rice to the temple for alms on the 10th Buddhist month, "Boon Khao Sak"?

If yes, what type of rice do you bring?

Do you have a ceremony to consult the ancestor spirit to predict the rain for the reason?

Do you watch the fruiting of the plants to determine when in the season it will rain?

How often do you go to temple?

When giving alms, what are the three foods that you give most often?

Do you know how to make rice noodles the traditional way from your own rice?

Do you use rice for any medical treatments?