CHAPTER I
INTRODUCTION

A short venture outside of the city of Chiang Mai, Northern Thailand will quickly reveal large structural changes in the once rural, agricultural setting. Whisking along four lane highways you will pass rice fields checkered with large suburban tract homes and walled off parcels of land awaiting new urban dwellings. Speculators have grabbed up once fertile lands, subdividing them and marketing them to Thailand's expanding middle class searching for Western affluence amid the shrinking vestiges of country life. Caught within this transformation are thousands of small land holders, rice growers, and vegetable farmers attempting to maintain a livelihood through compromise and change. They are described as an emerging hybrid rural class of land owners with multiple occupations. The agrarian setting appears destine to succumb to neoliberal [1] consequences of urban growth, consolidated holdings, marketing networks, and landless farm workers or farmers with day jobs (Rigg, 1997: 165-197).

But agrarian transitions, as all social changes, can not be easily explained by a simple conceptual understanding, though localized social transformations can be placed into "explanatory niches" (Rigg, 1997). My research will suggest that the slowly emerging markets for safe and organic vegetables, here defined as vegetables grown with regulations certified by third party agencies, offers the opportunity for small farmers to obtain a livelihood apart from the dire forecasts of evidence obtained from the research of conventional, global foods markets (Agrawal, 2005; Marsden, 1997). Moreover, this research will demonstrate how non-conventional forms of agricultural production are congruent to traditional agricultural practices and Thai village lifestyle.

The problem facing all parties involved with the production, distribution, sale and consumption of safe and organic vegetables is in defining the meanings of

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[1] Neoliberalism concerns itself with the economics of free, unrestricted trade and open, unregulated markets.

safe and organic. There are a multitude of regulations and standards covering all aspects of production, as well as many different and competing agencies certifying and promoting these standards. This research will use an actor-network approach to organize the many actors, meanings, and levels of production of the certified vegetable market. The actors will be situated into spaces produced by power and discourse. Regulations will be examined as the outcomes of ideas shared across network boundaries, internalized, transformed and translated into new methods of production.

1.1 The Theoretical Argument

Actor-network theory presupposes that all actors participating in a network have power to shape and direct the activities of the network. Actors may be individuals, enterprises, collations, committees, instructions or government agencies. Actors may be non-human, such as the rules, regulations, guidelines, protocols and procedures, bring written and non-written, to include customs and traditional practices of social interaction (Thrift, 1996: 23-26). Power may be economic, political, social, and symbolic (Bourdieu, 1989). Using this approach, this dissertation will construct an argument demonstrating that the discourse of northern Thai organic agricultural networks, in the form of both regulation and discursive practice, constitutes these networks within a larger context of global, national, and local objectives. Each network promotes a unique set of discursive objectives, these being the ideals and beliefs of its actors, as well as the social and economic policies on which its regulatory policies are founded. Furthermore, these agricultural networks are not static institutions, but are constantly transforming to new information and techniques, consumer demand, and competitive forces.

1.2 The situation

The focus of my research is on vegetable crop production. Vegetable crop production accounts for a very small portion of total farm production in Thailand. (Table 1.1) The narrow focus of organic vegetable crop production allows for identifying unique problems in organic production processes and exposes the unique community and cultural elements of Northern Thailand. Many factors complicate an

analysis of regulations. For example, Figure 1.1 shows that nationally over 45 percent of all farmers claimed to use no pesticide at all, with the most farmers reporting from the northeast and southern Thailand. Many crops, including traditional varieties of rice, do not need pesticides for production. Certain vegetable crops do not need pesticide protection from insect damage when grown at certain times of year. These crops will be reported as pesticide free, though they may not necessarily be certified. Many issues about regulated agricultural production processes can be problematize for analysis by examining how cultivation occurs under locally specific circumstances. Regional variations in production practices are considered by local safe vegetable production regulations.

Table 1.1 Percentage of farmland in rice and vegetable production in Thailand

Percentage of Farmers growing rice or vegetables					
	Total	Central	Northern	Northeastern	Southern
Rice	52.00%	42.80%	53.50%	69.60%	9.90%
Vegetable	1.40%	3.00%	2.10%	0.60%	0.40%

Source: 2003 census data from the National Statistic Office of Thailand
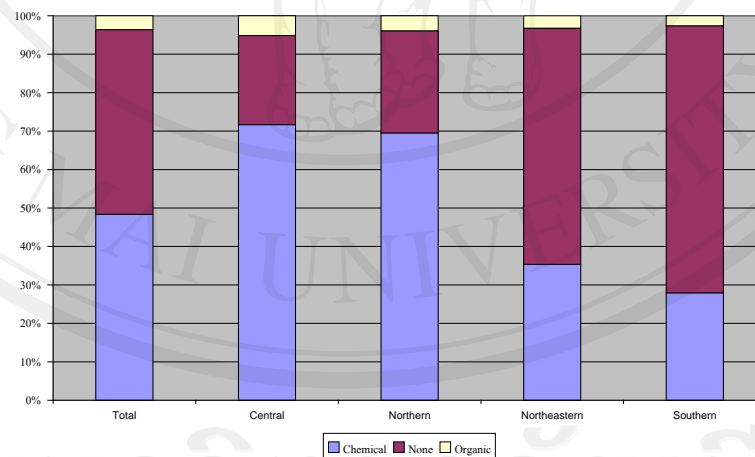
	Total	Central	Northern	Northeastern	Southern
Chemical	45.9	72.7	69.8	31.7	27
None	45.6	23.5	26.7	55.1	67.1
Organic	3.4	5.2	3.9	2.9	2.5

Figure 1.1 Pesticide use by region in Thailand

Source: 2003 census data from the National Statistic Office in Thailand

I learned from preliminary interviews that vegetable cultivation and marketing is markedly different than for staples such as rice or soybeans, crops typically used in Asian studies of organic farming. (Table 1.2) Agricultural staples tend to be produced through monoculture. Production is generally uniform, and the product is milled, graded and packaged into uniform consumables. These networks are impersonal. Farmers, assemblers, distributors and consumers may never actually meet each others as the scale of production will be for national and international marketing. Furthermore, most agricultural staples in Thailand are regulated by the government through price supports. On the other hand, vegetable crops open a window into the dynamic network of daily markets, perishability, personal relationships, seasonality, multiple time frames (or events), assemblers, middlemen, and consumer's desire for freshness and appeal. Furthermore, the production of local vegetables further complicates the study of safe and organic vegetable certifications because they may not be directly cultivated by the farmer. Local vegetables often grow within the spaces of biodiversity encouraged by certain agricultural practices. Local vegetables are harvested and sold in both local fresh markets and national retail grocers. Examining vegetables allows the research to travel through every possible scale of production and supply, from brokered sales to large shippers and canners to production for a single vegetable cart.

Table 1.2 Comparative attributes of vegetable crops and staples

Vegetable Crop	Staple (Rice)
Relatively low shelf life	Long shelf life
Small farms (less than 2 rai)	Small to large farms (5 rai +)
Intensive land use	Extensive land use
Diversity in production	monoculture
Contracts or direct sale	All contract farming

As a point of clarification, this analysis of certified vegetable markets in Northern Thailand will use the term certification and certify to mean the process of verifying compliance with a regulatory standard for the production of vegetable crops. Regulatory compliance generally include standards for the types of pest control methods used, limits on the types and amounts of fertilizers applied, farm record keeping procedures, and other regulations guiding the process of growing vegetables at a farm. The use of the term certification implies a specific regulatory regime. A specific certification will correspond to a particular set of regulatory standards. Therefore, certification under GAP means that a farmer followed all of the regulatory protocols of the GAP program overseen by MOAC. Regulated agricultural spaces, production processes, and consumer markets are produced by the interaction of local, national and global forces. Local ideas and values can not be considered as ideal or static, but are constantly being translated by the imposition of global discourse. Local markets and production process are in competition with global and national markets, and with what will be referred to as neo-liberal economic policies.

The history of subjugation and bureaucratization of Chiang Mai by Bangkok, and the global influences brought with domination, is relevant in understanding the current agricultural situation in Chiang Mai today. Understanding the historical developments sheds light on the apparent split between the goals and objectives of organizations promoting safe vegetable production around Bangkok and Chiang Mai, explaining the basis of conflicts in meaning and implementation of organic agricultural. Like many agricultural landscapes in Asia, the fertile, alluvial valleys around the city of Chiang Mai are imprinted with a long history of contestation,

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changing practices, and in recent memory, the hegemonic and dynamic effects of global discourse and national policy.

Traditional farming practices can be traced back to times before King Mengrai, the official founder of the Kingdom of *Lanna* in 1292 and the City of Chiang Mai in 1296 (Penth, 1994: 41). For centuries Northern Thai people, the *Khon Muang*, [2] adapted to the local conditions of their tropical valleys. Northern Thai kingdoms organized large-scale, cooperative irrigation systems to deliver water to village rice paddies. These paddies also produced a wide assortment of additional nutritional foods, including fish, crabs, frogs, insects and local vegetables that made up most of their diet. The *Khon Muang* came to rely on the hundreds of local vegetables grown with very little human cultivation or agricultural inputs (Chatthip Nartsupha et al., 1999: 20-23).Today, most of these vegetables can be purchased seasonally in the "fresh markets" throughout Chiang Mai.

Prior to Bangkok's formal acquisition of Chiang Mai, the Northern Thai lived in a frontier without cadastral boundaries. The *Khon Muang* did not perceive their territory as fixed, demarcated boundaries. The central Thai, known now as Bangkok Thai, perceive a city largely in Western terms. The word for city, *mueang*, is defined as a city region in Bangkok Thai language. But the same word in *Lanna* Thai language is translated as "a populated geographic area the borders of which are formed by the surrounding mountains; it is a state in a valley" (Penth, 1994: 180-181). There were few titles to land; ownership was understood by use rights and dependant on the will of the king. This fact is relevant because it helps to understand a way of life before the assertion of Bangkok's bureaucracy. Many resources were shared in the *Lanna* village, especially the local foods freely available to everyone from the mountains, streams and paddies.

It is generally agreed by scholars that Thailand entered into the global marketplace in 1855 with the signing of the Bowring Treaty with the British, particularly the logging concessions which focused British interest on the northern forest of Chiang Mai(Thongchai Winichakul, 1994: 13; Wyatt, 2003: 200). With the advent of foreign powers pressuring the Siam government into accepting fixed,

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[2] The *Khon Muang* may also be referred to as the people of the kingdom of *Lanna*.

demarcated boundaries came the imposition of state controlled, western style bureaucracy throughout Thailand. The extension of discourse, hegemony and military control was carried out by King Chulalongkorn's half brother, Prince Damrong Rajarnubhab, who was appointed to head the Ministry of the Interior. Under Damrong's direction, the ministry completely subordinated all regional authorities under Bangkok administration (Wyatt, 2003: 194,205). Thai historian Tej Bunnag describes this period as a time when "Siam was transformed from a conglomerate of states without clearly defined boundaries to a compact state with a definite frontier. The foundations were laid for a modern central administration and a centralized provincial administration" (Thongchai Winichakul, 1994: 146). The people of *Lanna* were organized into administrative units, the largest being the province of Chiang Mai and the smallest being the village. All administrative levels were controlled by appointees of the Ministry of the Interior. Rules and procedures for interacting with the new state bureaucracy were developed though these were always open to negotiation and compromise through the *Phu yaiban*[3].

The idea of "frontier," suggesting that there is a central region of Thailand and all else that lay outside of that space. Thai geographer Thongchai Winichakul investigated the concept of the Thai frontier and defined it as a space of "otherness." The administration of Bangkok approached the enforcement of administrative policies on the former kingdoms of Thailand as a colonial authority. The Bangkok government, under the spirit of nationalism, set up a fundamental contradiction by redefining the collective Thai people as one group and then set about to conscript the nation into a Bangkok's idealized Thai vision. The Bangkok government, and particularly the Ministry of the Interior, initiated policies creating a polemic of "civilized" Thai values of Bangkok versus the frontier values of "others" (Thongchai Winichakul, 1994: 130,135,147; Thongchai Winichakul, 2000: 55). Bangkok developed a "spatial division of power" segregating provincial groups by their degree of "identification of Thainess." The acquisition of local resources and domination of regional polities was masked by the urgency to establish a national unity (Chusak Wittayapak, 2008). The circumscriptions of Bangkok were deployed by a relentless

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[3] The village headman

process of bureaucratization to make provincial Thailand conform to national ideals. The nation-state of Thailand emerged, not from a long process of nation building, but by a "sudden restructuring of the way in which the Bangkok court apprehended the territory and people it ruled" (Gehen Wijeyewardene, 2002:148). By 1890, Chiang Mai came under complete administrative control of Bangkok, including a system of taxation over local farmers resulting in a need to plant cash crops or sell locally made goods to pay the tax (Penth, 1994).

Throughout this research reference will be made to Chiang Mai province and the City of Chiang Mai, as well as to administrative districts around the city. The city of Chiang Mai is located in the district called *Mueang Chiang Mai (See map)*. But the city of Chiang Mai is also called Tessaban Nakhon, an urban center larger than 50,000 residents. The Chiang Mai Metropolitan Area includes the cities of Chiang Mai and Lamphun, but this demarcation is not appropriate for agricultural research. This research will analyze political units by administrative districts, known in Thai *amphoes*[4], and by subdivisions these districts, known in Thai as *Aw Baw Taw,* translated into English as Tambon Administrative Organizations, or TAOs. Finding the appropriate moniker is often difficult, especially since the economic inter-relatedness of all of these subdivisions is often blurred in the literature and agglomerated into a vague unit known simply as Chiang Mai. However, I will specifically refer to Chiang Mai province as the largest political area containing all of the districts studied, the city of Chiang Mai when referring to the vague yet interrelated urban areas located around *Amphoe* Mueang*,* and to specific *amphoe* when appropriate.

The earliest influence of globalization and neoliberal policy on Thailand's economic and social structure began with Bowring in 1855, opening up Thailand to capitalist business ventures through trade with the United Kingdom. Thailand saw major social reforms and economic changes. The completion of the Bangkok-Chiang Mai Railway in 1922 brought greater integration of Chiang Mai's economy into the global trading network of Bangkok. Prior to the railway, long-tail boats moved rice,

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[4] Amphoe is the Thai equivalent of district level administration. Above the *amphoe* is the *changwat,* or provincial level administration. Below the *amphoe* is the *tambon*, or subdistrict, and then the *ban*, or village.

teak, tobacco, and local produce to the port of Bangkok. River transport could take up to three months to complete a round-trip between the Chiang Mai and Bangkok. The railway made it possible to transport goods in one day. The railroad opened up Chiang Mai to Bangkok speculators, Chinese merchants, and nobility. The increase in speculative revenues also empowered *Lanna* royalty to seek ownership of farm lands. Without legal titles and with no political power, Northern Thai farmers suffered from large scale land confiscations by Bangkok and northern princes, their associates, and wealthy Chinese merchants anxious to gain from the newly accessible global rice markets. The Ministry of the Interior took direct control over Chiang Mai in 1933 (Penth, 1994).

Villages outside of Chiang Mai were slow to change, maintaining a culture and way of life developed over its 700 year development. It was reported that while farmers near the city of Chiang Mai began using imported products such as kerosene, matches and iron for tools, those outside the city, farmers living outside the city continued to use pig fat and yang oil for lamps, flints to make fire, wove their own cloth and grew their own food for sufficiency. It was reported that many traditional practices continued, such as pounding rice, continued in San Sai, one of the *amphoes* of this study as late as 1989, as did other home weaving and other practices for self-sufficiency (Chatthip Nartsupha et al., 1999: 62-63). Personal observation made during this research verified that many traditional practices, such as basket and cloth weaving, as well as the gathering of local foods and planting for self-sufficiency continues to this day.

Over time, farmers in Chiang Mai, as in much of Thailand, increased their use of pesticides to increase crop yields (Figure 1.2). Conventional farming practices, based on the use of chemical inputs, made farmers dependent on agricultural suppliers for pesticides, fertilizers, and hybrid seeds. Thai farmers found themselves trapped in an effort to constantly increase yields to sell more rice at lower prices. Farmers had to rely on low interest, government banks for loans to pay for seed and chemicals. Gradually farm debts increased and the Thai government was pressured into assuming many bad loans and many farmers lost their land.
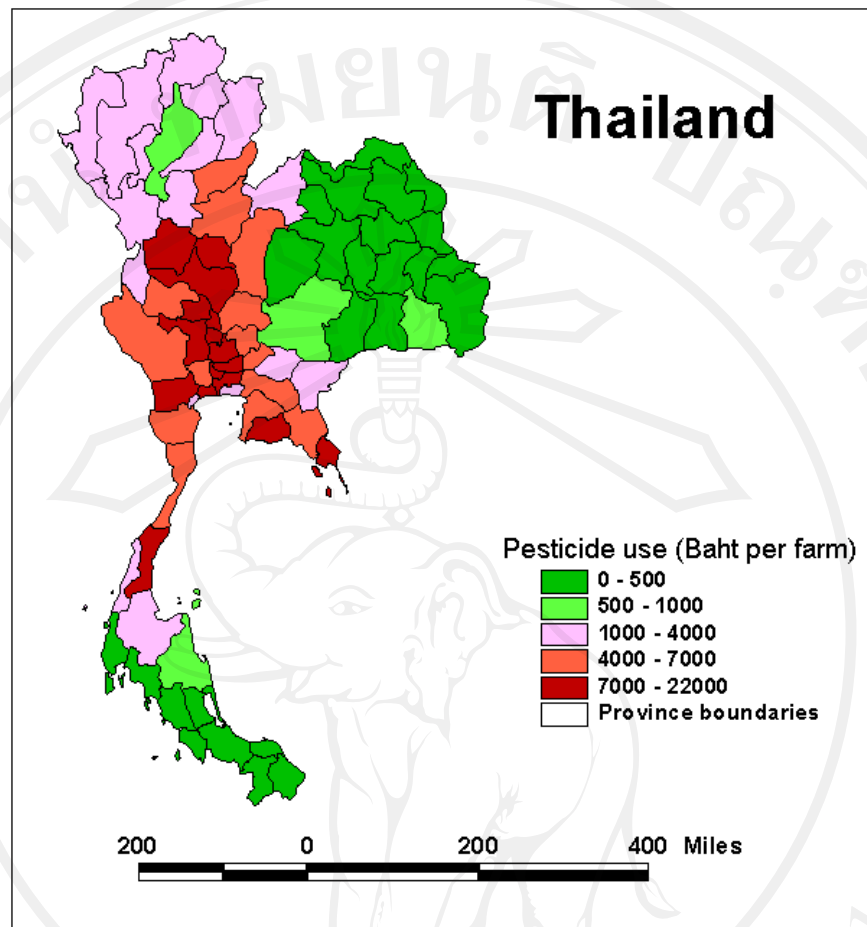
Figure 1.2 Map of pesticide use in Thailand

Source: (Bartlett and Bijlmakers ,2003: 1)

Outside forces of globalization have strongly influenced the policies of Bangkok's bureaucracy and suppressed the formation of Thai national groups to counter the negative consequences of neoliberal policies. Globalization, in economic terms, is defined by the United Nations as "the reduction and removal of barriers between national borders in order to facilitate the flow of goods, capital, services and labour" (United Nations, 2003). Globalization was summed up by Noam Chomsky as simply "international integration." However, Chomsky goes on to define economic globalization "as network of closely interconnected concentrations of power" (Chomsky, 2006). While this definition is useful in assigning the role of power to globalization, the following definition helps explain the role of globalization on regulations: "the diminution or elimination of state-enforced restrictions on exchanges

across borders and the increasingly integrated and complex global system of production and exchange" (Palmer 2007). For this dissertation, globalization refers to the integration of power, resources, and production practices of international networks.

Neoliberalism is a mode of economic thought guiding many of the most dominant and conventional of the global economic networks. The tenets of neoliberalism can be stated as follows: "The essence of the Neoliberal position on international commerce is the proposition that economic growth will be most rapid when the movement of goods, services and capital is unimpeded by government regulation." Neoliberal theory rests on the idea of comparative advantage, stating that economies of individual nations will develop toward the most efficient production of goods and services in a free trade market system (MacEwan 1999:31,48). Sometimes stated as the "neoliberal agenda", global neoliberalism directs "the power of markets in the name of economic efficiency, which requires the elimination of administrative or political barriers capable of inconveniencing the owners of capital in their individual quest for the maximization of individual profit, which has been turned into a model of rationality." It deconstructs the organizations with the public realm capable of challenging its premises by defining them as unnecessary and wasteful attributes of government interfering with the daily affairs of business (Bourdieu, 1998). Neoliberalism and globalization are often juxtaposed against local and traditional values and practices. Such comparisons are awkward in that the local and the global are not always readily distinguishable as independent formations. This research will elaborate further on the interconnectivity of local and global networks, as well as the concept of "co-constituting" actors and networks as defined by actor-network theory.

Modern neo-liberalist discourse is based on a neo-classical approach to economic decision making. Neoliberalism traces its origins to the late 18th and early 19th century, anti-mercantilist ideals of David Ricardo and Adam Smith. During that time England's economy was suffering under protectionist policies, especially from tariffs instituted by parliament under the "corn laws" which restricted important while protecting outdated practices of the landed nobility. Smith explained how rational self-interest and free market competition will lead to a balanced economy and national prosperity. Ricardo also assailed protectionist policies as limiting a nation's ability to

pursue economies based on their comparative advantage. He stated that nations should concentrate on producing those products with which it has the best economic comparative advantage. The ideals of Smith and Ricardo became the economic foundation of the Industrial Revolution and the rationalization and dehumanizing of the wage laborer (Deane, 1979: 206-207; Harvey, 2005a: 20; MacEwan, 1999: 31-34; Shahthis, 2007). Today, these same ideas of free markets and unrestricted production form the underlying principles of neo-liberal economic ideology. Within the scope of actor-network theory this process is referred to as a form of hybridization leading to "a fabricated nonhuman that has nothing of the character of society and politics yet builds the body politic all the more effectively because it seem completely estranged from humanity (Latour, 2005 :206). The global civil unrest of the 19th century led to many reform laws in Europe and North America to protect workers and governments from liberal economies.

Neoliberal ideas have been challenged as existing as pure theory and apart from social reality. The neoliberal agenda can be described as a discourse leading to a condition where the interests of the citizens, from the national level to local communities, are marginalized, valorized, commoditized and regulated by forces acting outside of the nation-state. The fundamental contradiction in the neoliberal agenda is that it while it espouses free, unregulated and unrestricted markets it also advocates the protection of property rights and other materialities of capitalist productions, such as patents, resource ownership and other rights of private ownership, while limiting the rights of labor for organization and movement. It is inherently dependent on the state for the enforcement and regulation of these rights. It operates in markets which have been "historically constructed" by the proposition of specific economic schemes over others. In effect, Neoliberalism is not a concept of free, unrestricted markets, but it is a specific form of economic production regulated through policy, laws, regulations, and state power (MacEwan, 1999: 59, 106, 108, 124). From this perspective, Neoliberalism is "a global process of regulation and control" which uses the bureacratic structures of the nation-state for its implementation. The neoliberal agenda dovetails into global discourses of development, including international food regimes, which shape national policies and agricultural practices at the local level (Gupta, 1998: 23, 34).

A new wave of globalization and economic liberalization was brought to Thai with U.S. foreign policy from 1950 to 1975. This period was described as the "subordination of the Thai domestic system to the global system," resulting in the stabilization of elite leaders at the cost of social movements (Girling, 1981: 91). Though the United States brought tremendous infrastructural changes to Thailand, there followed large-scale exploitation of those Thai farmers and villages in the path of U.S. sponsored development. The combination of U.S. influence, frequent coups, military rule over Thai people, the impoverishing of the Thai farmer, as well as the disassociating of the intellectual elite allowed for the most negative aspects of neoliberal growth to permeate Thailand. The unregulated use of pesticides resulted in increasing numbers of poisonings from their use. During a brief period of stability, one civilian government passed the Food Act of 1979, making it illegal for anyone in Thailand to "produce, import for sale, or distribute… food which contains anything likely to be dangerous to health" (Bartlett and Bijlmakers, 2003: 39). Unfortunately, political instability made it difficult to enforce public health law. Pesticide poisonings continued to increase steadily until 1990. (Figure 1.3) By 1992, popular elections brought in a civilian government promising wide ranging social reforms, took leadership in Thailand (Wyatt, 2003: 290-291, 305).
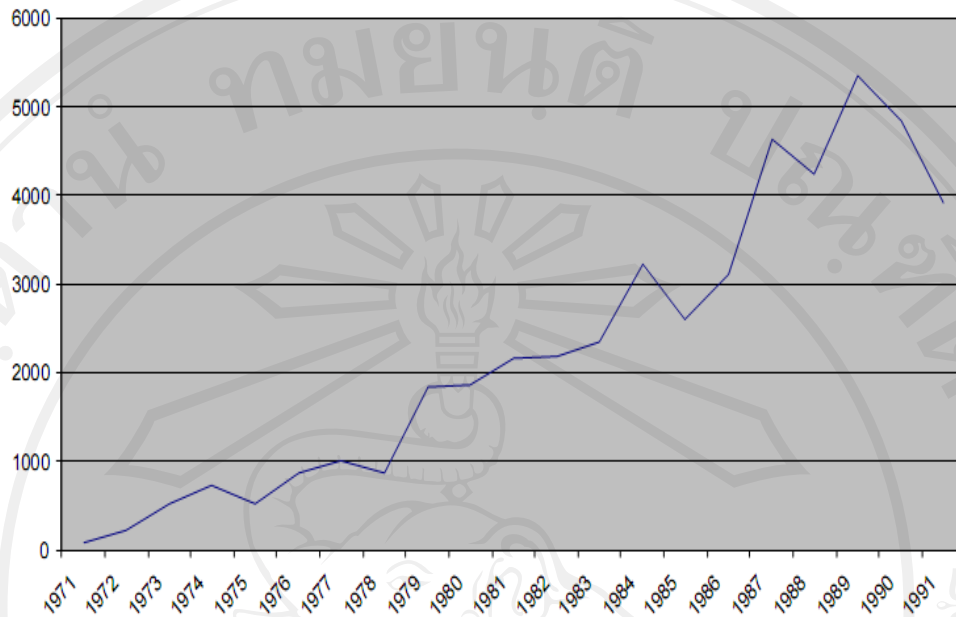
Figure 1.3 Pesticide poisonings: 1971-1991
Source: (Vitoon Panyakul, 2002)

Although the constitutionally based, democratically elected governments were not stable; the more progressive parties were able to enact many social and agricultural reforms. Among them were the Hazardous Substances Act and the Public Health Act of 1992. Both acts made it illegal to import or sell foods containing hazardous substances (Bartlett and Bijlmakers, 2003: 39). Noteworthy to this investigation is the policy called *"Pak Plod Phai Jak San Pis"* initiated in 1992. This agricultural regulation was overseen by the Ministry of Public Health (MOPH) and is generally referred to as "Safety Vegetable" In 1999, MOPH established the "Food Safety" program for the marketing of food products, including vegetables (WHO, 2004). These new programs were directed toward making reforms in the use of agro-chemicals by Thai farmers. From the point of view of the government, a reduction in agro-chemicals would help to reduce foreign chemical imports. From the perspective of the NGO and other civil groups supporting the legislation, the "Safety Vegetable" policy was a step toward much needed reforms in the livelihood and lifestyle of the Thai farmer and local communities. The new legislation help legitimize the activities of many NGOs already pursuing safe vegetable production and organic forms of

agriculture. Today there are many different governmental and non-governmental organizations promoting regulated, certified agriculture in Thailand. (Table 1.3)

Recent studies concerning the effectiveness of government regulations put the issue of enforcement in serious question. For example, a 2004 study determined that over 10% of vegetables labeled with the GAP exceeded pesticide residue standards. The main problems leading to irregularities include government subsidization of pesticides, a lack of clarity in GAP procedures, and insufficient communication between ministries and stakeholders (Somsri Songpol, 2005: 37; Vicha Sardsud, 2007: 77, 80). Furthermore, consumers have limited awareness of what constitutes organic, safe and hygienic. A 2006 dissertation studying consumer attitudes toward organic foods in Bangkok found that 97% of consumers surveyed in Bangkok did not know the meaning or "organic" (Roitner-Schobesberger, 2008).

Previous studies have detailed the history of the development of Thailand's organic, pesticide free, and pesticide reduced organization, listed companies and organizations promoting these practices, or listed, as above, the problems encountered at the marketplace (Aphiphan Pookpakdi, 2000; Aree Wiboonpongse and Songsak Sriboonchitta, 2004; Boonrahong Chomchuan, 2008; Sununtar Setboonsarng, 2006; Thiprad Maneelert, 1999; Vitoon Panyakul, 1998; Vitoon Panyakul, 2002). These detailed studies will be used to describe the situation throughout its analysis. The problem is that while there is a desire on the part of the government to support programs to improve the safety of agricultural production and consumption, the situation is far too complex to be solved by simply writing laws and sponsoring the dissemination of regulatory programs. This dissertation will examine the complexities of creating safe and/or organic agricultural commodity networks in Thailand by going beyond marketing and economic approaches by framing the situation within an actor-network approach.

Table 1.3 Organic and safe agriculture organizations

1.	Alternative Agricultural Network
2.	German Technical Cooperation (GTZ, Bangkok)
3.	Green Net Cooperative
4.	Institute for a Sustainable Agricultural Community
5.	Large Scale Private Industry (Swift Co. and River Kwae)
6.	Maejo University, Chiang Mai (MJU)
7.	Ministry of Agriculture and Cooperatives (MOAC)
8.	Ministry of Commerce (MoC)
9.	Ministry of Natural Resources and Environment (MoNRE)
10.	MOAC Agricultural Extension
11.	Northern Organic Standards Organization
12.	Organic Agriculture Certification Thailand (ACT)
13.	Santi Asoke
14.	Thai Organic Trade Association (TOTA)

1.3 The Research Questions

This dissertation analyzes regulated, certified agricultural production practices, farm groups, supporting organizations, and the actors responsible for certifying vegetable crops around Chiang Mai as a case study to answer the following research questions:

Question 1: Why do local and external forces of power and discourse contend and compromise in the market space of organic agriculture? In what ways may historical influences account for this situation? How can this be explained in terms of power relations between competing actors?

Question 2: How do discourse coalitions (storylines, ideologies, dispositions, objectives and beliefs) formed by different actors explain the acceptance of different regulatory regimes and practices of certification?

Question 3: How does the concept of hybridized boundaries and (networks) (the discursive interfaces of social spaces) explain the unique coalitions observed in the organic vegetable commodity chain in Chiang Mai?

The first question establishes the position of actors within the certified vegetable network and seeks to explain the apparent discordance within the certified vegetable marketplace. This question does not seek to explain causation in terms of binary relationships. Instead, it draws on the framework of analysis established by actor-network theory which presents situations as emergent and co-constituting. The questions acknowledge the power inherent in local organizations and that of non-local actors which are assumed to be state and global powers. There will be ambiguity in the way actors align themselves with neoliberal and other cultural agendas. As it turns out, these ideas are neither absolute nor mutually exclusive.

The second question delves deeper into the ideological basis of power. It seeks to explain the goals, objectives, and expected outcomes desired by the actors. There are many different kinds of vegetable certifications available in Northern Thailand. These different certifications are employed to meet different needs and outcomes of the networks reinforcing them. This dissertation will explain the needs and purposes, the underlying motivation of networks as objects within a framework of actor-network theory.

The final question will explain why the notion of binary or absolute rules and regulations can not exist in the real world of agriculture. It will also explain why most, if not all, regional, agricultural networks are overlapping. These networks are made up of many decisions and limited resources. Land, materials, labor, and other resources must be shared or otherwise negotiated on the supply side. Conversely, consumers make purchases based on many criteria for which few market venues can fully meet. This dissertation acknowledges the proliferation of the term "hybrid" in the literature; the term remains a useful description of the commingling and co-constituting aspects of actor networks and will be used to describe the networks and spaces of certified vegetable production and sales in Chiang Mai.

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1.4 Literature Review

    An agricultural commodity network describes the distribution of food from producer to consumer. The concept is based on an economic approach known as commodity chain analysis develop by Gary Gereffi to describe linkages in production for global manufacturing systems (Raikes et al., 2000: 6). Agricultural commodity networks have been developed through many different approaches, including simple linear models, complex *filieres*, and actor-networks. This research will use an actor-network approach to organize the complexity of actors constituting an agricultural network rather than traditional commodity chain analysis which simplifies the interaction of the actors into linear relationships. Actor-networks represent the non-linear nature of the constellation of linkages in agricultural commodity networks.

    A linear commodity chain approach focuses on vertical market elements and global markets. A linear commodity chain follows production from the farmer to the wholesaler, the retailer, and the consumer. (Figure 1.4) It is the most simplified commodity chain construct and uses supply and demand as a basic unit of analysis. Though linear analysis often employs complex regimes of variables to explain the market motivations, it also holds many economic forces as constants. In economics, these constant are based on the assumption of "all things being equal." Linear analysis is useful as a static approach to market analysis. If there are no changes in certifications, farm land values, government interventions, climatic conditions, or outside world markets, the conditions determined by linear analysis will probably hold true. However, the real world is neither constant nor holds to unrealistic assumptions. In fact, the world is generally unpredictable. For example, linear analysis would assume that if the price of certified long bean was high that farmers would plant long beans until the market reached equilibrium. Observation will show that when the price of long bean is high that entire villages will plant long bean creating an oversupply during harvest. In Thailand's open market system, there is no equilibrium, only erratic booms and bust. Another shortcoming of a linear approach is that it does not examine the influences of horizontal linkages such as government policies or NGO advocacy. It can not anticipate irregularities such as the Thai government's promise of a price support for rice farmers and then the government's

refusal to honor its commitment in 2008. Price support was reinstated in Chiang Mai only after farmers trapped government officials in their offices in protest.

There are other types of commodity chain analysis which use economics as one of many factors in evaluating how enterprise is sustained in commodity networks. These methods use factors such as regulations, conventions, and social causes, to analyze commodity networks (Watts and Goodman, 1997: 1-17; Raikes, Jensen et al., 2000: 2).
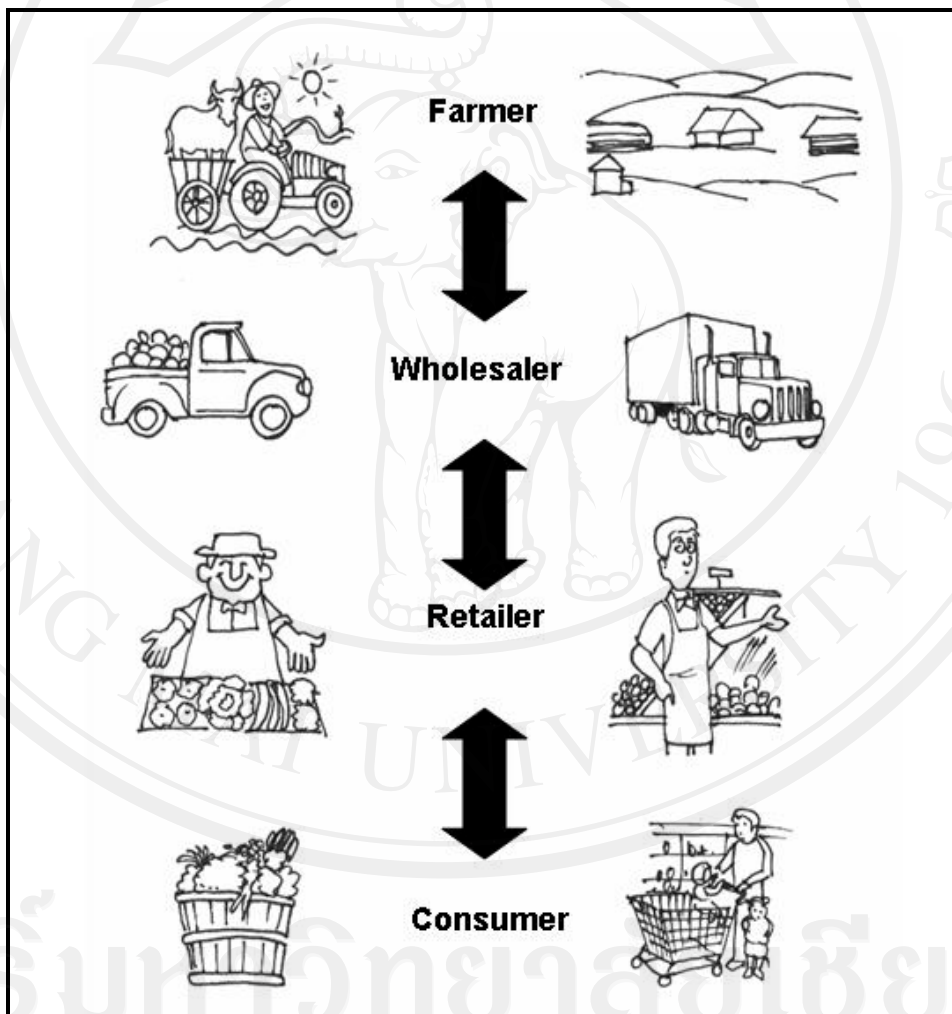

Figure 1.4 Linear food network

The French *filiere* approach is a type of commodity chain analysis used to analyze agricultural commodity networks. Though the word *filiere* means chain, *filiere* analysis is not entirely linear. It is generally commodity specific and limited to

a specific sector of the agricultural economy. This method of analysis relies strongly on uses quantitative data to map out commodity flows and identifies the agents and activities within the *filiere*. It tends to focus on local production and then follows vertical and horizontal linkages involved in constituting the *filiere*. The *filiere* itself is an assemblage of risks and institutions, products and actors. Products become qualified by branding, reputation, certification, inspection and/or approval. The industry supplies standards and norms, the market determines price and quality, the government institutes guidelines and quotas, while society provides conventions such as fair trade or free trade (Raikes et al., 2000). Political reforms and policies are evaluated as forces which shape the *filiere* by placing limits on both price and production. Government policies enhance some nodes while creating barriers to others (Watts and Goodman, 1997: 15). Contracts are evaluated in regard to their effectiveness and enforceability; ideal contracts are generally those mutually agreed on by farmer and distributor (Watts and Goodman, 1997: 21).

Food networks (also called food chains) is an approach used to analyze both horizontal and vertical linkages throughout the network. Food networks do not assume absolute power relations. Instead, they are organized into actor network where actors give and take power relationally, not structurally. In this way food networks are limited to open market systems and can not account for monopolies or state-industry relations where a single producer is allowed opportunities and concessions unavailable to other actors. Food networks use convention theory (Figure 1.5), assuming the networks to be based on norms, values, qualifications, rules procedures and organizations (Raynolds, 2004: 726-728).
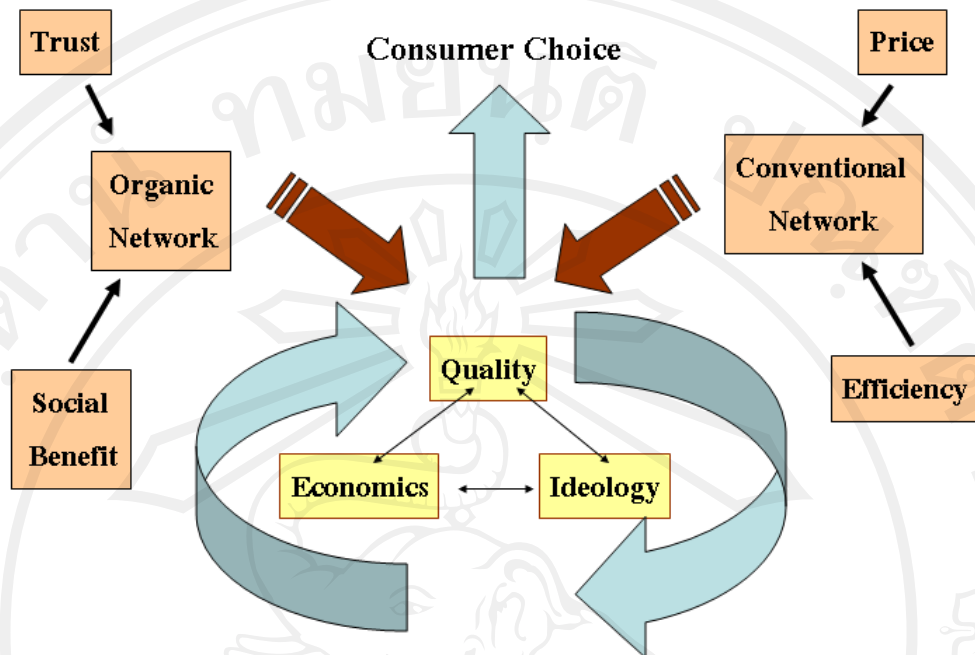
Figure 1.5 Food chain (networks) approach

➢ **Commercial conventions are based on price**
➢ **Industrial conventions are based on efficiency**
➢ **Domestic conventions are based on trust**
➢ **Civic conventions are based on social benefit**

Commodity chains are categorized into "mainstream" and safe market conventions. Mainstream conventions are economically based factors such as efficiency in production, transportation and marketing, price, and governmental or industrial regulatory standards. Alternative market conventions are factors such as consumer trust, personal relationships between key actors, health, safety and biodiversity. A commodity is seen as "embodying the processes of the commodity framework." Primacy is given to political and regulatory governance which is defined as having power and authority over the economic actors of the commodity chain. Economic relationships within the commodity chain are held to be controlled by political regulation. Consumer choice results from the symbolic and material construction of the food network. Ideology, social values and organic standards become incorporated into the value added process and in turn become incorporated

into the food network. In the case of organic foods, labeling and descriptors concerning environmental health and social justice are commoditized. Discourse supporting various marketable attributes of the commodity is treated as adding value to the product through consumer demand for the perceived social characteristics of the food. The value of the certified product is a composite of the retail price of non-certified produce, the actual cost to produce certified produce, the profit necessary to maintain the farmer's livelihood, and the premium the consumer is willing to pay for food security, environmental protection, and other social causes (Raynolds, 2004: 726-728).

My research will use some components of food networks to structure the certified vegetable networks, particularly ideas about the commoditization of symbolic value. However, my research rejects several notions about convention theory. This research is situated in the emerging tradition of post-modernism which rejects the notion that social structures can be totalized into absolutes. The food network assumes that the production, distribution and sales of commodities can be organized into discrete social functions. Actor network theory, as a post-modern approach, holds that discursive elements are co-constituting. The concepts of commercial, industrial, domestic and civic cannot be segregated into separate, non-interacting elements influencing specific social and economic outcomes. The idea of organizing a network into these specific domains with various concrete properties dismisses the complexity of the network and the power transmitted through the interactions of each of these market forces into constituting the market.

All commodity network studies must take into account contract farming. The relationship formed by the contract stands apart from open market strategies in so far as negotiations have been settled before all market conditions are known, it is an attempt to bring stability to the marketplace. Contract farming is an agreement made between a farmer and a distributor to grow and purchase a specified quantity of agricultural product meeting specific quality standards. The contract, in regards to its relationship to the network, may provide "a distinctive form of commodity production with a distinctive labor process." Contract farming accounts for most organic and safe production process certified farming in Thailand. The contract, as part of a strategy constituting an organic commodity network, imposes a specific certification

and set of standards onto the landscape. It controls and dominates all aspects of production and hence projects its own topology onto the commodity network (Gouveia, 1997: 63-64).

There are four basic models explaining the different methods of organization of contract farming These are centralized, multipartite, informal and intermediate models (Eaton et al., 2001: 46). The centralized model explains contract farming when one corporation (actor) controls all aspects of vertical linkages within the agricultural sector. An example of centralized contract farming is the Central American banana plantation where one company holds rights over the land, production process, and controls transportation and distribution to retailers. The corporation may also hold power over retailing by corporate branding, such as the Dole Fruit or Chiquita label. The multipartite model demonstrates how many companies form joint ventures to establish the commodity chain for the production and distribution of an agricultural product. These companies will have complimentary roles and will share in the profits at the value-added nodes (Raynolds, 2004: 125-126).

The informal model can be seen throughout Thailand. Small entrepreneurs will make contracts with local farmers and assemble enough product to meet the requirements of larger distributors, or simply deliver the assemble product to a central wholesale market. The goal of the entrepreneur is to achieve economy of scale for profitability. The individual farmer's production may be too small market individually.

The intermediate model is typical of Thai commercial farming. Collectors (assemblers and middlemen) contract with processors or distributors to supply produce from individual farmers. It is similar to the informal model except for scale. The primary problem of intermediate contract farming for certified agriculture is in maintaining the chain of custody. This process "disconnects the direct link between sponsors and farmers that can result lower income for the farmer, poor quality standards and irregular income (Eaton et al., 2001: 55). In Chiang Mai, ISAC, MCC, RFP, and small-scale assemblers all have contracts with their farmers.

Actor networks can be used to evaluate the valorization of regulatory discourse within agricultural networks. One such implementation of actor-network

theory used to analyze the organic foods industry is the alternative food network approach. It is described as "the differential creation of value though the coming together of different actors to produce and shape nature" (Raynolds, 2004: 728). Certification and social meanings inscribe vegetables and thereby produce and shape networks of production and consumption. Vegetables become hybridized products with meaning and value. This approach is strongly depended on the discursive analysis of the power being words, symbols, and other forms of marketing. It is very useful in understanding the outcome of social conditions which place value and emphasis on specific forms of discourse, though it falls short in understanding the causes of those social conditions.

Another actor-network approach organizes the production, distribution, and consumption of products into agricultural commodity networks. This concept helps the researcher to see the subtle, yet often very powerful influences affecting local situations from actors seemingly far removed from the situation. Distant power brokers, national level politicians, and international regulatory agencies may extend their power by dominating relationships that hold a network in order. To this effect, some actors attain a "global reach" in their ability to manipulate and extract value from networks (Whatmore and Thorne, 1997: 290).

The actor-network approach is particularly useful in examining contradictions in discourse, particularly as approached as seeing things differently. When using the actor-network approach reality, that is, the conditions of daily life lived by all of the actors is translated into a multiplicity of truths by actors seeing the situation from different standpoints (Lowe and Ward, 1997: 258; Mol, 2005: 76). Organic and safe vegetable regulations present a challenge to neoliberal policy. These regulations may be explained as restrictions on trade or opportunities for investment, depending on the type of industry supporting free trade policy. Another issue that my research will address is how government and other actors with authority seek to problemetize issues within the realm of their own discourse. Social issues, including environmentalism, reduction of poverty, and in the case of this study, safe agriculture, are translated and framed within their "moralities, epistemologies and idioms of political power."

Safe agricultural regulation and certification identified by this study emerge from differences in global, national, and local discourse. These regulations include the global discourse imposed by the Bangkok bureaucracy on community culture[5], the effect of collaboration or autonomy on market exclusion, the role of patronage with its inherent contradictions and access to social resources, the contradictions between free and fair trade, the contentious powers within regulatory regimes, economic factors such as cost and scale of production, and different practices and livelihood associated with different types of certification.

Controversy exists as to the economic role of organic agriculture. For example, organic, GAP and safe agricultural is rephrased by the UNCTAD as "Environmental, health, and food safety requirements" or EHFSRs. These are identified as both "non-tariff barriers to trade and as new opportunities to export competitiveness. Regulations deny access to many countries unable to comply with "stringent, complex, and frequently changing" standards. However, these same requirements create "strategic markets" for developing countries, especially for "products" such as biodiversity and traditional knowledge (UNCTAD, 2007). Within a neoliberal context, safe and organic agriculture is a form of regulations interfering with free market competitiveness. Neoliberal markets circumvent this problem by supporting organic regulations adapted to large-scale marketing. In many ways, the discourse of sustainability has been co-opted into the global discourse of poverty reduction *vis a vis* development by the World Bank, various organizations within the United Nations, and the Asian Development Bank. Within the context of these world players, sustainability means a sustainable economic trajectory and national balance of trade. The idea of sustainable agriculture, within the internal discourse of Thailand, has quite a different meaning.

Proponents of safe and organic agriculture embrace a multitude of ideas and perspectives about the hazards and environmental implications of pesticides, the harmful effects pesticide use has on the body, as well as many other social concerns about conventional farming. The reason safe agriculture is claimed to be "non-conventional" is that it is not based on simple market forces of supply and demand.

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[5] Community culture refers to the social relations practiced within Thai village society.

All actors participating in these networks are doing so because of values, concerns, beliefs, or fears about the quality and deleterious effects of conventionally produced vegetables. In addition to public concerns, the government creates a "specific problem space" by endorsing agricultural regulations in response to concerns expressed by constituents or lobbying conducted by producers, distributors or consumer groups. The government may exert control "through calculated activities of political forces" (Rose and Miller, 1992: 11), a concept referred to earlier as a type of discursive technology deployed to regulate specific activities.

Bruno Latour opened up a "Pandora's box" with a concept uneasily called actor-network theory. Most social investigators using his ideas refer to it as an actor-network approach because Latour's descriptions and the application of his ideas question the relevance of "social theories." Latour describes theory as situational explanations based on co-constituting actor-networks. Actor network theory entered into the agrarian question through the "nature" debate. The question in contention is whether nature is a socially constructed concept or is constituted by essential qualities inherent in the cosmos enveloping man. Proponents of actor network theory claim that nature is understood through cultural meanings and symbols. It is produced materially as products of the market. In this way nature cannot be understood as something separate from humanity. It can not be placed in a binary or dialectical duality of nature vs. society or rural vs. urban. Instead, nature and humanity co-constitute each other (Castree and Macmillan, 2001: 209-213). Within a post-moern paradigm, there is no intrinsic or essential thing called nature (Forsyth, 2003).

This is well exemplified in agriculture. Humanity transforms non-human space into productive space. However, the environment also constitutes the space through factors such as climate, soil, and light conditions. The environment limits the universe of possible definitions and production capacities for agricultural spaces. Non-human things, such as technologies, seeds, and certifications, become inscribed into objects or entities within the network. Non-human objects, such as labels and certifications, become symbolized, commoditized, and situated as constellations of power. Objects may be translated (interpreted and transformed) by other actors, but their essential meaning and position is agreed upon by all other actors (Latour, 1991: 105,123). For my research, translation will be defined as a "mechanism by which the

social and natural worlds progressively take form" (Thrift, 1996: 23). This wide-ranging definition, practically assuming the entire debate over the role of a individual and agency in constituting society, refers to the mechanism by which ideas are exchanged and modified between networks. Translation is a process conducted by individuals and institutions creating "common understandings without erasing differences" (Harvey, 2001: 199). Actor-networks are defined as inherently permeable and malleable. Ideas, as non-human actors, may flow freely between networks, being apprehended, understood, and, if desired, integrated into the prevailing discourse, though not always as the original idea, but as something different, altered and defined within the context of the adoptive network. This is the process of translation.

Actor network theory sees translation as a process by which actors transform and reproduce ideas, and their underlying power, into practice and thereby, through repetitive interactions, produce and stabilize networks (Thrift, 1996: 24-25). Networks are held in place by objects referred to as immutable mobiles. The "immutable" mobiles help to hold the network in a shape or pattern. The shape of the objects is known as topology. Networks are held together by many different objects, be they actors, objects, or immutable mobiles. Each one maintains it position with the others through repetition of practice, being the degree of interaction strengthening and binding the network together (Brown, 2005: 37-38; Law, 2002: 96). These practices include the transfer of knowledge (Whatmore and Thorne, 1997: 292) material relations (Law and Hetherington, 2002: 398) and accumulation of value (Marsden, 1997: 170).

Actor network theory holds that networks of actors are dominated by unequal power relations. Dominant actors are powerful minorities in large complexities of many actors and networks. As networks develop, old minorities will recede and new minorities will ascend. As objects transform into understanding, something is gained and something is lost. Latour uses transformation and translation interchangeably. An object, an actor, or identity is transformed by being translated into something new. For Latour, translation "does not mean a shift from one vocabulary to another… I use translation to mean displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree

modifies the original two" (Latour, 1999: 179). Latour wants us to understand this as representation through a collective. The collective is a coalition of actors bound by discourse. Humans and non-human objects are brought together through social and political powers, "articulated by different associations." Within a collective translation brings an object into understanding, it then undergoes crossover, which may be defined as being accepted by the collective and then enrolled, or internalized into it (Latour, 1999: 193-194, 304). Boundary coalitions form between networks with similarity, such as those presented in this dissertation being farmers, assemblers, certifiers, and resellers and consumers, rejections and negotiations occur, new shapes are transacted and at times ruptures occur. Transformations and remnants are recontextualized and integrated into new networks, new coalitions emerge.

Agricultural regulations, as a form of inscription, is a type of "calculative technology" linking network nodes and reinforcing action at a distance (Rose and Miller, 1992: 17). This term is formulated by extending the meaning of "technology" to describe a discursive tool. Agricultural regulations become a way of "calculating" the risks and benefits of a particular production process which is overseen and certified by a third party inspector. Food quality is maintained through certified, regulated production process which becomes part of the value added process. Economic risks associated with production are generally shifted from the distributor, up the network, to the producer. The network expands horizontally to embrace increasing governance. Power is controlled by actors through domination of quality (regulatory) standards (Marsden, 1997: 173-176). The profit within this system is generated by an accumulation of actors, regulations, and negotiations operating on the circumstance of supply and demand. This way of seeing an agricultural production system is far more complex than basic supply and demand as it details each level of power as contributing value and, in some cases, contributing to demand.

The market represents a reality of understanding and acceptance of the conditions of agricultural processes. Certified agricultural networks incorporate various truth statements asserted by the certification process into discursive objects. Other actors and sub-networks apprehend these objects into other truths. Actors and object form a relationship whereby different networks see objects differently. Therefore objects can be apprehended in many ways through many understandings,

utilities, and perceptions. Concepts like organic, "Safety Vegetable" and GAP are not concrete. Once apprehended these concepts are objectified; to some degree reduced and in other circumstances amplified. Reduction comes from the perspective of the observer who places restrictions on its understanding. Amplification comes from observing while attempting to standardize and make universal statements about the observed (Latour, 1999: 70-71). The truths known within each network exist between different points of view. For example, organic agriculture, as an object, is a generalization and a specific process, unique and stable within its network regulations (Latour, 1999: 89-72).

The concept of network ordering is useful for situating actors in agricultural commodity networks, sub-networks, and all of the various linkages which bring the actors together. Once ordered, the discursive boundaries separating commodity networks may be examined as permeable interfaces where network objects are exchanged, evaluated, internalized and translated,. Ordering is produced by the various degrees of power each actor exerts on all other actors in the network. For example, organic farming is described as a mode of ordering, being one arrangement within a multiplicity of orderings within the entire food network. Safe vegetable production is another form of ordering, leading to a different arrangement of network actors constituting the safe vegetable network. Agricultural commodity networks are performed through relationships. (Figure 1.6) The connectivity of these linkages strengthens the ordering. Network ordering can also be seen as paths of communication of knowledge specific to performing the network. Specific knowledge within and between network nodes allows actors to control access. Non-conventional ideas, such as fair trade and biodiversity can also contribute to network ordering.

Agricultural networks are further shaped and patterned by power relations existing between the actors within it. The network is performed by repetitions of transactions and is made more durable through use. These performances are ordered and organized through definitions, meanings, certifications, and other inscriptions placed around actors and objects. The terms "Organic", "Safety Vegetable", and "GAP" are inscriptions place on vegetable commodities transforming them into non-conventional commodities. These terms become hybridized objects that have socially

produced topological shapes, patterns and order in their networks. The hybridity is flexible and negotiable, being the outcome of bureaucrats and farmers translating them without actually rupturing the topology of the inscribing discourse (Latour, 2005: 303-311). New formations of certified agricultural production breakaway and contest the normalized standards of exiting institutions leading to new standards, certifications, and commodity networks (Williams, 1995: 67). Ideological concerns can create breakaway networks, causing new and distinctive modes of ordering which constitute unique nodes and linkages leading to the consumer (Whatmore and Thorne, 1997: 296,302). Particular emphasis on this concept will be demonstrated in the final chapter while discussing the genesis of local organic standards in Chiang Mai.
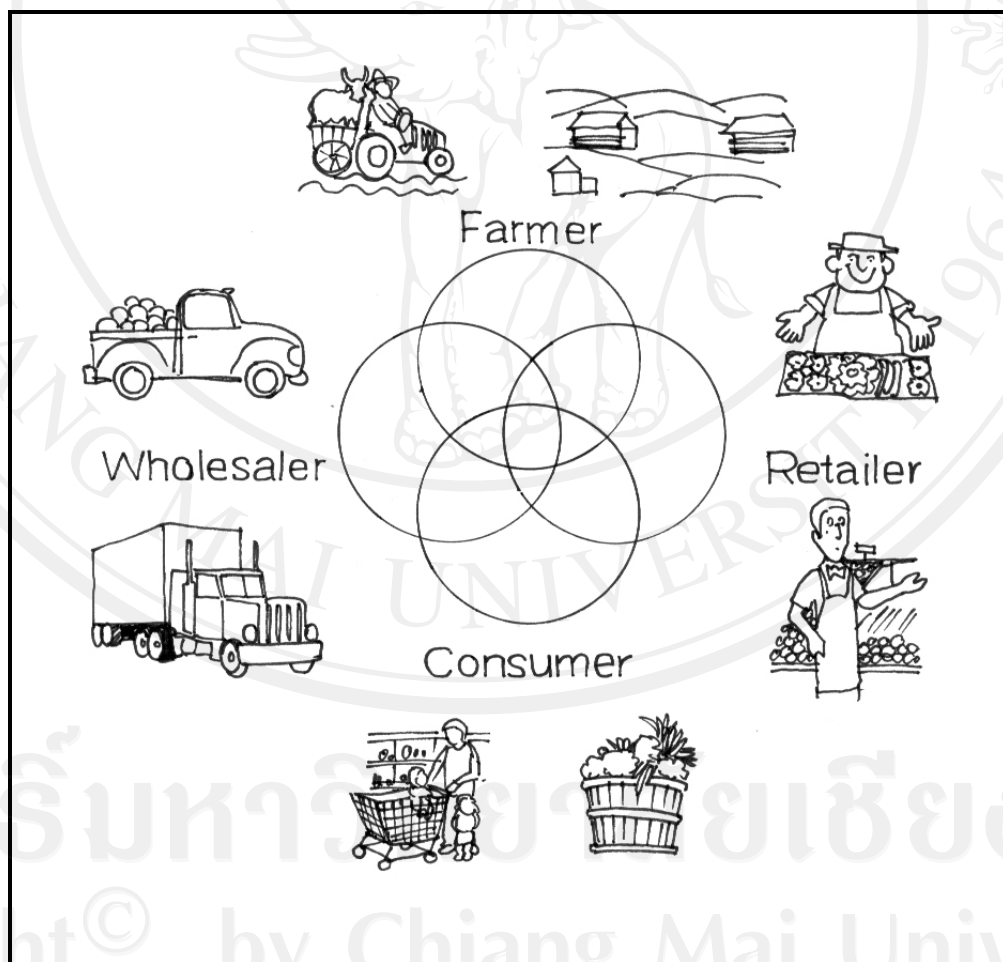

Figure 1.6 Actor-network approach to food commodity networks

Recent studies suggest that an actor-network approach can help in understanding the complexity of power and relationships driving a commodity chain. The agricultural commodity chain is redefined as an agricultural commodity network constituted by horizontal and vertical linkages of actors constituting interrelated nodes. Actor-network theory may help explain the power and influence behind the horizontal linkages constituting the organic vegetable networks and the actors who provide credibility and certification (Marsden, 1997; Raynolds, 2004). Another problem of researching organic vegetable production is identifying appropriate unit of analysis. There is too much complexity to focus on any one actor or process. However, there appear to be general strategies used to constitute the network. These strategies may be conceived of as discourse coalitions of actors holding the same beliefs, values, and understandings. My research will help to understand the assumptions, politics, and institutions behind the storylines and how diverse discourse is used to establish commodity networks along social boundaries (Whatmore and Thorne, 1997: 291-293).

The term "strategy" will be used throughout this dissertation to describe network ordering. A strategy embraces not one actor, but a group of actors whose relationships, for better or worse, hold the network together. A specific strategy emerges as a set of performances based on knowledge and power. All of the actors use strategies to maintain their position in the network. Strategies converge to constitute nodes and reinforce relationships, which further encourages particular strategies to be deployed. Nodes are strengthened and markets established when all of the actors strategies are resolved and needs are satisfied. Strategies are used by all of the actors in each network to establish their positions and power. By focusing on the strategy and not the individual, the strategy, as it is actualized into a safe or organic vegetable commodity network, becomes the unit of analysis. Successful strategies are those in which the practices of the farmer synchronize with those of the assembler, retailer, and consumer. Strategies are not absolute, and each actor may use several different strategies based on price, need, and opportunity. That is, actors may participate in multiple networks. The focus on networks, and not on actors, allows the research to focus on the accumulation and performance of power of all of a network's constituents.

At this time different coalitions of Thai consumers have established commodity networks around GAP and "Safety Vegetable", NOSA and MCC standards. Except for NOSA, the general public appears to have been excluded from direct participation in the creations of production standards. Further research is needed to understand the role of consumers and consumer advocacy groups on official policy regarding certified production processes. Research is also needed to ascertain if the public is involved in the establishment of these standards and the role, if any, of consumer advocacy groups on government policy regarding organic production.

Certified vegetable networks in Northern Thailand are constituted by horizontal and vertical linkages of actors bound by interrelated nodes. Certifications provide farmers, assemblers, and retailer's credibility in establishing certified vegetable markets by contextualizing the vegetable market into a framework of meaning understood and accepted by consumers (Marsden, 1997; Raikes et al., 2000; Raynolds, 2004). There are general strategies used to establish certified vegetable commodity networks. Strategies are based on the scale of farmers' production, the regulations adopted, and the associations made for marketing the vegetables (Eaton et al., 2001). Strategies order the network through knowledge, subjects, objects, distances, and locations (Law and Hetherington, 2002: 397).

Organic regulations embrace many ideas of agricultural production. The use of chemicals and pesticides, though considered the most important concept behind organic standards, is only one of many issues considered important for organic regulations. Issues such as fair trade, sustainable development, and biodiversity[6] are also prominent in the agenda of most national and international regulations. My research will use the International Federation of Organic Agriculture Movements (IFOAM) as an example of international organic standards organization. IFOAM "is a grassroots and democratic organization that currently unites 750 member organizations in 108 countries." IFOAM is an accredited international organization

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[6] Fair trade policies encourage resellers to pay a fair (non-exploitative) price and support human and socially responsible production practices. Sustainable development is a notion that people can engage in livelihood practices which can maintain the community and environment in perpetuity. Biodiversity is a policy advocating the preservation of species in a community.

with the United Nations Environmental Program. IFOAM acts as an institution to standardize international regulations for organic commodity trade. However, IFOAM has certain reservations about Thailand. First, IFOAM is critical of Thailand's national agenda for self-sufficiency economy as serving the national community by promoting the reduction of chemical usage in agriculture instead of promoting organic export standards. IFOAM identifies most Thai organic farmers as "small scale holders" who "do not fully understand the holistic principle or standards applicable to organic agriculture" (IFOAM, 2006). IFOAM appears to want an all or nothing approach to organic agriculture leading to export quality production in Thailand following the regulatory regime established by IFOAM. The following chapters will demonstrate that IFOAM has both contributed to the growth of organic farming in Thailand while at the same time impeded local development of alternative practice and limiting opportunities for small scale organic farming. However, opposition to IFOAM has helped to produce safe networks throughout Thailand. Discursive objects were shared, borrowed, translated, and transformed into new truths, regulations, and agricultural networks. Without IFOAM, the development of safe agricultural practices in Thailand would have been dominated by market oriented, classic economic and neo-liberal approaches. These forces conceptualize the Thai farmer and Thai safe agricultural practice as discourse to be manipulated by international market forces of supply and demand. IFOAM is one of many institutional authorities establishing truths through policy and power (Blakie, 2001: 139-140). Regulations are seen as both barriers to access and opportunities for product differentiation. However, the complexity of power relationships, community and societal goals, local livelihoods and cultural practices as attributes of the agricultural are eliminated by the assumption that profit underlies all productive activity.

In geographic research, the study of politics and policies, as objects of power in social space, has developed into a geographic approach called "critical political ecology." Its objective is to identify the institutional bases on which certain facts or assumptions are based (Forsyth, 2003: 18-22). When applied to organic agriculture, the critical approach asks us to see "organic" as a socially defined concept dependant on the political policies and power structures supporting it. The use of the term organic agriculture reduces the concepts behind the process. The multiple

complexities of organic agriculture are placed into a "black box" and emerge as a simplified, unchallenged fact (Latour, 1999: 193). Organic is not a natural process, it is a socio-political process. Organic agriculture is constituted by meanings, power, policies, and politics. There are many organic institutions requiring certification for admittance into national and international markets. Organic discourse is applied to many vegetables in many ways. Pesticide free and pesticide reduced vegetables are not strictly organic but are accepted by consumers as equivalent. In Thailand, at the local level, organic agriculture is accepted as being grown by community standards.

My research uses critical political ecology to analyze the "political forces behind different accounts of 'ecology'" (Forsyth, 2003: 5). Critical research includes analysis of the historical antecedents of global, national, local powers as causal agents. Within critical political ecology's analysis, knowing occurs through "mechanisms by which knowledge about the environment is produced and labeled, then used to construct 'laws,' and practices by which such laws .and lawmakers are identified as legitimate in the political debate" (Forsyth, 2003: 6,10). Power accentuates legitimacy, but legitimacy obscures the fact that all actors and networks involved in a situation interact, shape and transform the apparent discourse. Where networks adjoin, collide, or merge, actors with power seek to express their legitimacy and, where contentious, deny that of others. An analytical approach looking at power relationships situates the authority of administration of law as one of many actors, those to whom law, rules, and regulations has disqualified as illegitimate are seen as less powerful actors.

Institutional "black boxes" redefine many issues into simplistic statements and explanations. Generalized statements become part of "orthodoxies" based on institutional goals. Though orthodoxies may be founded in truth, they are often incomplete, partial assessments of causality (Forsyth, 2003: 21-38). Truths emerge from the powers of actions and understandings throughout all of the relationships making up networks, with both human and non-human actors as participants. Political ecology breaks open the black boxes of institutions while actor-network theory places the contents into a framework of understanding.

Institutions impose a reality based on the conditions and networks holding them in place (Forsyth, 2003: ,59-62). The science behind Western organic

agricultural methods carries with it the assumptions and conditions of Western cultures, agricultural products, production processes and environs. Placed within an actor-network framework, organic agriculture is seen as a political event, mobilizing assumptions and impositions into new networks, causing coalitions to arise and translations to occur. The term "organic" presented many problems with my research. The Thai word for organic agriculture is *kaset insee*, which I used in my surveys and during field interviews. However, it does not translate literally as the Western idea of organic. The term "organic" in Thailand is generally assumed to be something grown safely and relatively free of toxic residues. It does not necessarily mean to be grown without pesticides. Within Thailand there is much misunderstanding on the part of consumers, growers, and government officials as to what organic certifications mean. There are different meanings for domestic and export vegetables.

To clarify and differentiate the meanings behind the different agricultural processes discussed in this research am using the term safe agricultural production to refer to all agricultural production practices which regulate the amount of pesticides used, ranging from organic processes to those allowing controlled pesticide applications. Processes which are pesticide and chemical free, organic in the understanding of Western ideology, will be called organic. The term organic will also be applied to the larger debate about organic discourse. Other processes, such as GAP or "Safety Vegetable", will be identified as such. Certifications such as "Organic Thailand," "Safety Vegetable," and GAP are not organic by international standards. These certifications are based on regulations concerning the type, amount and timing of pesticide use. The credibility of these certifications has been put in doubt by outside investigations which have revealed that there is a lack consistency and efficient regulation of the vegetables bearing the GAP "Q" logo. (Figure 1.7) A 2004 study determined that over 10% of vegetables labeled with the GAP exceeded pesticide residue standards. The main problems leading to irregularities include government subsidization of pesticides, a lack of clarity in GAP procedures, and insufficient communication between ministries and stakeholders (Somsri Songpol, 2005: 37; Vicha Sardsud, 2007: 77, 80).

Figure 1.7 Official government certification logos
Left: GAP "Q Logo," Center: Discontinued "Organic Thailand," Right: "Safety Vegetable" label with official government logo. Top reads *"Pak pload phai jak san pis."*

Observation at a distance, uninvolved and non-subjective, can not explain practices of power. Translation and practice is explained through a multiplicity of positions, the observation must be situated at the point(s) of translation and then again from the point of the source of power(s). In this way all sides be understood, the relative degrees of action and power can be explained in context. Translation is a representation of both human and non-human meanings and intentions. The actor is not a person, though a person may be an actor. The actor is the meanings, powers, and intentions of persons, institutions, corporations, and governments. Actors can vary widely in scale and in power. Actors constitute and are constituted by networks. Networks are made of many coalitions of actors mobilized around the belief or support of the foundational discourse. Actors and networks are one in the same, being coalitions of will and intent, necessity and need. Their staying power is a matter of persistence, acceptance, power, and domination. Within a network power moves throughout the nodes, across distance, time and scale by translation. Power in actor networks is resolved though translation resulting in new forms of practice. The dynamic can not be judged without ceding authority to a compelling discourse. However, the social affects of translation can be understood by the processes of translation and powers of enforcement.

Meaning and principles of organic agriculture may be explained by the way discourse is "rendered technical" by certifying bodies. This concept has been used to explain a practice of government whereby science, statistical information and theory are used to bound and enclose populations by technical solutions (Li, 2007:7). Li

introduces the idea of "trusteeship," a position of power where an actor claims to have knowledge of how things should be done. It is "the intent which is expressed by one source of agency to develop the capacity of another" (Li, 2007:5). Trustees rely on various forms of governmentality whereby the government acts on subjects through rules and discipline. In particular, through "rendering technical" all aspects of understanding occurs through statistics, data, defining power and problematizing situations (Li, 2007: 7, 12).

Trustees guide subjects through the displacements and dispossessions of capital's advance while being unaware or unconcerned that they themselves are mediators of capitalism (Li, 2007: 21). Li states her objective as understanding those who lives are affected by both trustees and capitalist development not as actors oppressed by outside forces but instead as actors whose "struggles have been formed within its matrices" (Li, 2007: 29). Policies are what create the boundaries between trustees and the populations which they serve. Trustee policies, such as the imposition of European markets into Indonesian culture, create contradictions in the system. There was no room for compromise, no space for displacement to occur. When the Dutch imposed an external discourse to Indonesia, translation became perverse, as some communities sought to be accepted while others remained excluded. Li observes that one of the main problems of translation of the rules was a "plurality of specific aims" whereby trustees experimented with different rules. Those who could translate them prospered, while those who could not suffered (Doherty, 2007: 52).

Too often trustees invoked policies directly meant to be untranslatable, such as the forced relocation of villagers from the highlands. These policies were enacted to forcibly change the meanings and practices of village networks by the Dutch (Li, 2007: 68-69). Indonesian villagers were defined and categorized not only by Dutch colonialists, but by the national government. (Li, 2007: 81). The same projections of discourse can be seen in Thailand. With the arrival of each new trustee, the forest inhabitants of Indonesia attempted to translate policy into acceptable practice. Furthermore, with each new opportunity of capitalist markets came a change in farming practice. The same situation can be seen in the agricultural practices of farmers in Chiang Mai.

Unlike Forsyth who imposes a high moral ground of "villains and victims" on his units of analysis (Forsyth, 2003: 9), Li presents an analysis not of heroes, victims, and villains, but of many actors at multiple scales of power interacting, translating, excluding and profiteering on policies and market conditions. She demonstrates how villagers used compromise and strategy to translate the goals of the policy maker into productive village livelihoods (Li, 2007: 198-203, 212-213). Rendering technical allows governments to operationalize through complex relationships of technology and bureaucracy.

Certifying bodies, codified regulations, and other discursive objects emerge as points of passage (Rose and Miller, 1992: 20). In the most general sense, a "government attempts to create a calculable universe in which entities and activities would be mapped, enumerated, translated into information, transmitted to the center, accumulated, compared, evaluated, programmed, and the duties of each actor and locale would be relayed back to them down the network in the form of norms, standards, and constraints" (Rose and Miller, 1992: 26). This concept was applied to the management of forests in India. The government used statistics and technical information to reposition the actors in their way of seeing the forest. "They contributed to the way forests can be imagined by reshaping the policies affecting the form and characteristics of forests in national life, by changing the lens through which people view them, and by introducing a new language through which to imagine them… Statistics accomplished a shift in context of the one erased, objects being selected for representation. The numbers representing selected features of the forest then erased, and came to stand in for, the vegetation from which the numbers were extracted" (Agrawal, 2005: 62-63). The government, in effect, uses its political power to govern the economy and livelihoods of the forest communities. In this way, governmental power can be described as "not so much a matter of imposing constraints upon its citizens as of 'making up' citizens capable of bearing a kind of regulated freedom." The strategies of government, "shape the beliefs and conduct of others in desired directions by acting upon their will, their circumstances or their environment" (Rose and Miller, 1992: 1-2).

Agrawal explains that "locality, state, and community are constructed through the technologies of government which creates tools for 'rethinking them'"

(Agrawal, 2005: 89). This idea of technologies of government is explained as "a domain of strategies, techniques, and procedures through which different forces seek to render programs operable, and by means of which a multitude of connections are established between the aspirations of authorities and the activities of individuals and groups" (Rose and Miller, 1992: 13). Neoliberal expansion through the use of state power uses new technologies of government to decentralize power and extend its reach into more and more communities. The use of numbers and numerical relationships to represent objects enhances governing at a distance. The same process can be observed as the national and international technologies of certification extends ever deeper into Northern Thailand. The technologies of government in Thailand have been examined by many Thai researchers. For example, the scientific implementation of management schemes most often conflicts with local schema of environmental reproduction and are directed toward the interests of the state, not the community (Santita Ganjanapan, 1997: 258). The codified regulations bring with them a nomenclature, a rationale, and a way of seeing into the social spaces of the Thai village community culture, directing farmers' attention ever farther outward toward the global milieu of capitalist production.

Global space subsumes the spaces of the Thai village community, bringing with it the "material practices of power" (Massey, 2005: 85). Rendering technical can be seen as part of the larger neoliberal project of globalization. "The political project of neo-liberalism, like any political project, possesses the capacity to 'make-up' people and social groups by speaking to qualities that were either latent within groups or already emergent" (Allen et al., 1998: 90). Neoliberal processes challenge the national and international forms of governmentality that problemetize general situations of agricultural production and rendered technical processes of production unsuitable for local production (Li, 2007: 7).

Countering the neoliberal agenda in the Northern Thailand is an association of NGOs and educational elite, many of whom promote the idea of *Watthanatham Chumchon*, translated as "community culture." However, there is debate regarding the validity of their idealization of this concept. Critics of community culture assert that its advocates do not present social "reality itself, but their ideal norm of society" (Kitahara, 1996: 68,104). Advocates of community culture claim that it is a way for

farmers to "recover their conditions of self-reliance and self-confidence to plan and implement an ideal rural development by autonomous and collective means" (Kitahara, 1996: 65). Foremost among community culture advocates is Chatthip Nartsupha who has, for many years, advocated the Thai peasant's way of life as a unique cultural formation, sustainable and antithetical to neoliberal economics and globalization. Chatthip has suggested that there exists a unifying cause among Thai villagers, a *raison d'etre* capable of resisting the state and creating an autonomous and self-sufficient village community life through Thailand. He stated that "It will become a powerful force to gather the strength of all Thai villagers to come together and push for a movement aiming to achieve a better life for all" (Chatthip Nartsupha, et al., 1999: 128). During my five years in Thailand I have not observed this phenomenon. In fact, I have observed how the Thai government formed under the party of former Prime Minister Thaksin Shinawarta was able to take control of Thai politics by manipulating the sentiments of rural Thai people through rhetoric and large government grants.

Critics suggested that proponents of community culture selectively problemetize their agendas by choosing "concepts, ideas and discourses which either attracted more public support or deligitimatized their countermovement groups" (Lertchoosakul Kanokrat, 2003: 236). This brings back the issues of governmentality, that trustees, governments or NGOs may frame situations within their respective realms of truth. Community culture has also been accused of being a populist approach and essentialist.

> "Generally the 'community culture' school seems to put more emphasis on advocating a kind of populist discourse as a way to strengthen village power in relation to outside power…The problem is that this kind of discourse is based mainly on an idealistic image of village but ignores its dynamic in a changing culture of rural communities, particularly in confronting the state domination" (Anan Ganjanapan, 2000: 214).

I believe Anan to be correct in his emphasis on the idyllic weakness within the community culture debate. Proponents have fallen into an ideological trap of essentializing the village as something static and apart from Thai society. Anan's

own research on ethnic villagers in Northern Thailand demonstrates not only willingness, but the success brought about by villagers working with the Thai government to resolve conflicts. However, I believe Anan's work advocates a fundamental principal within the basic idea of community culture, that there is a "social phenomenon which is distinctively Thai" (Chatthip Nartsupha, et al., 1999: 119). Though the village Thai life may not be appropriately described as "*Watthanatham Muban Thai*" (Thai village life), expressed by Chatthip as "the soul of the village [that] remains free" (Chatthip Nartsupha, et al., 1999: 244-7), it has been observed by Anan and others that "villagers have increasingly reproduced their cultural and moral values into more formal practices" where villagers gain recognition by the government and access to resources (Anan, 2000: 195). Anan's pragmatic assessment of the Thai villager acknowledges not a romantic soul defending an idyllic way of life; instead his assessment suggests that there is a unique way of practicing Thai culture and relationships, a way seeking to defend its forms of livelihood and traditions in the face of global and national neoliberal ideals and objectives. Anan's villagers, attempting to preserve a "community forest", are neither completely unified nor traditional; they are social hybrids responding to domination and loss of access to resource. However, they work within a unique framework of "political and economic contradictions" of Thai society (Anan Ganjanapan, 2000: 207).

As a foreigner living in Thailand the debate over the appropriateness of using the community culture concept is beyond my ability to express as a unique opinion. I must rely on the way Thai people express their understanding of community life. I believe much can be gained by using the term community culture over other terms such as "village life" or "local Thai culture." The concept of community culture has evolved out of the Thai literature where it is defended and challenged. Though it may be as vague as similar terms such as "Americanism" or "Westernization" and subject to as much debate and harsh rhetorical exchanges, it does embrace a set of values and practices which are part of the daily life of Thai village farmers. It is not absolute; it is a trajectory of culture extending deep into the historical roots of the *Lanna* people, modified by over a thousand years of external influences, practiced today by a subaltern group within the Thai nation-state, within a

global setting. Recent publications have suggested that the Thai village community is "multidimensional" and "continually reproduced by communicative practices between resources users" and those practices of the Thai village community are embedded within a local context unique Thai culture (Yos Santasombat, 2008:160). However, the knowledge systems enacted by villages, as local forms of resource management, are challenged by the "centralized, technocratically oriented" Thai national government (Santita Ganjanapan, 1997: 250).

Throughout my interviews, community culture is often offered as a response to globalization. This is particularly interesting in that the English word "globalism" was initially translated into the Thai language as *lokanuwat*, a word meaning greed, or even "to eat, or consume, the world." This translation did not settle well with those who advocate neoliberal policies in Bangkok. The idea of overtly excessive greed and neoliberal policy could not be reconciled with the traditional Buddhist ideals, however superficial, supported by the industrial elite. The word was retranslated as *logapiwat*, meaning "to reach outward, to make contact with, to the extent of conquering the world" (Bechstedt, 2002: 318; Reynolds, 1998: 126). From Bangkok's perspective, globalization became something to take control over and pursue as part of national Thai identify. Within the Thai cosmology globalization became something Thai, to be spread out to all of the frontiers of Thailand, and beyond. It should be noted that not all elements of globalization can be considered deleterious to Thai people. Various technologies of communications and avenues of advocacy can be seen to help the disempowered gain access to the rights of government. Thai society has been described as "outwardly looking" and seeks to improve itself by utilizing and incorporating ideas into itself that it finds interesting (Reynolds, 1998: 129). However, Bangkok's newly found "manifest destiny" has found resistance in the frontiers of northeastern and Northern Thailand. Local community culture was not to be so easily absorbed into Bangkok's interpretation of a global way of life. Community culture was labeled as "anti-state" and "anarchistic." Attempts were made to call it a movement attempting to "distill the essentials of Thai-ness" into something anachronistic and dangerous to Thai development (Reynolds, 1998: 139). Community culture, from this perspective, would be more of a dogma than a discourse, an absoluteness representation of Thai culture, which is hardly the case.

This debate continues with the idea that local knowledge is used as a counter-discourse to help preserve the local livelihoods while at the same time is used by "transnational advertising agencies… to sell their products" (Reynolds, 1998: 140).

The appropriation of community and identity is well documented in the discourse relating to highland people who became recognized by the Thai government as a single conglomerate of peoples in 1959. The Thai village continues to be conceptualized as an idyllic community, essentialized and homogenized within the literature, governmental policies and popular culture, regardless of distinctive cultural differences. The appropriation of Thai village life has been described as an "invented discourse" (Pinkaew Laungaramsri, 2003: 29, 39). The fictionalization of the Thai landscape arose from an aspect of globalization and domination, of those with power and the "others within." The invention and reinvention of culture is not limited to the demands of the nation-state, but also occurs at the local level. It can be effective at the local level as a means to access valuable resources, or be initiated as a hybrid response to global demand and local initiative (Chusak Wittayapak, 2008: 116,118). However, such hybrid discourse positions those situated outside of the "global" into an inferior position of power, susceptible to apprehension, exploitation, and commoditization. Community culture, when so identified and expressed as an opposition to globalization, may suffer from the same affects of exploitation. It becomes romanticized into a binary of "us versus them," with the local community being defined as traditional and essentialist. However, the daily life within the community is open and changeable. Community culture has also described as "creative and intellectual," capable of adopting appropriate forms of scientific discover and technological devices into community livelihood (McKinnon, 2003: 83). It would appear that the adherents of community culture listened to the criticism or those who would support its fundamental goals and situated itself into a network of exchange rather than exclusion.

My own experience with community culture has demonstrated that it is not a kind of movement or politicized activity of civil society. It is better defined a way to describe community relationships in the farming regions of Thailand. For example, I learned from an interview with a local farm leader, "Pak Boong" in Doi Saket that he became an organic farmer shortly after the price of soybeans plummeted around 8

years ago. He joined other farmers in a protest demanding that the government provide higher price supports for their soybeans. While at the rally he met representatives of the newly formed ISAC who explained to him that safe farming would take him outside of the conventional soybean commodity network and provide him with better income security. He joined ISAC, received training, and went on to convince fifteen other farmers in his community to join him. The eight members of that group organized a savings committee with the Bank of Agriculture and Agricultural Cooperatives of Thailand to invest in community equipment. This farm group also participates in activities with the local TAO and government *amphoe* office. What became apparent through the interview is that community culture is a process of building networks of relationships to access government or NGO resources and to build power through associations to protect the interest of the group. My research recommends that community culture is not an absolute opposition to modernity and global innovation; rather it is a challenge to the absoluteness of globalizing discourse. It is an assemblage of actors and discourse constituting a node in the larger cultural network of Thai identity, forming a point of passage for the global milieu of discursive objects. It is a space of exchange, where ideas may flow in and out, be assumed, consumed, integrated and modified. Community culture stands as a referent to the relevance, usefulness, and even destructiveness of certain global values, and in particular the neoliberal agenda. Chapter III will provide a conceptualization of community culture to operationalize several key elements of Thai interpersonal relationships into objects of discourse, i.e. non-human actors, to analyze their role in northern Thai agricultural commodity networks.

1.5 Conclusion

Long term historical conditions have led to the conflict between local values and global values in Chiang Mai., leading to modern day national interest to liberalize Chiang Mai's economy. One adverse effect of liberal economics and global development has been the unrestricted use of pesticides in agricultural production. National policies were enacted to protect public health as well as to slow the outflow of money used to purchase foreign produced agricultural chemicals. However, these policies were made ineffective by problems of enforcement and consumer awareness.

The following research analysis will use an actor-network approach to frame conditions of certified agriculture practiced around Chiang Mai. It is my goal to demonstrate that power can be assessed by analyzing discourse as network objects, organization can be understood in terms of discourse coalitions, and that the entire commodity network can be mapped as flows of information from producer to consumer as facilitated by the many linkages in throughout the network. The actor network approach provides an adaptable framework on which to construct an analysis of agricultural commodity networks in Northern Thailand. Each group of actors, they being the farmers, assemblers, certifiers, retailers, consumers, government officials and NGO leaders, may be arranged and examined in all of their interactive complexity. The network itself is co-constituting, that is, it exists as the sum of its elements, all actors influencing and being influenced by the others.

Agricultural regulations enter into the commodity network as non-human actors, exerting power and influence on the actions and decisions of all participating actors. Regulations are the outcome of social and political power and themselves contribute to the power of politics. From the perspective of political ecology, agricultural regulations insert themselves into the landscape, shaping the environment and its inhabitants. The following chapter will detail how this investigation will organize the power and actions of the various human and non-human actors into a methodological approach for understanding regulated and certified agriculture in Northern Thailand.