

CHAPTER II

RESEARCH APPROACH AND METHODOLOGY

My dissertation examines the unique coalitions of farmers, certifiers, assemblers, retailers, consumers that make up certified vegetable commodity networks in Chiang Mai. I specifically ask about how ideology, history and negotiation explain the way in which these networks develop. This chapter will identify the approaches and methods used to identify the actors and their positions, define terms specific to this study, the types of data collected, and the units of analysis used to answer the research questions. Commodity networks are relationships between farmers, intermediate actors, and consumers. Using an actor network approach, commodity networks are framed into groups of relationships. The term “relationships” is used here to identify the negotiations, agreements, perceptions, and all other forms of discourse occurring between each actor which constitutes nodes for exchange. Power moves from actors and networks through the inequalities of relationships. This research had to identify the actors, their relationships, and their inequalities. Power, dominance and inequalities were most often found at nodes of access, such as markets and qualifying for certification. These nodes, as well as specific individuals, including farmers, certifiers, and agricultural authorities, became the focus of my research.

Placing human and non-human actors into co-constituting network makes the geography of the situation observable as a spatiality of events, facts, surveys, and interviews which will be used to describe the objects of a network. By studying discourse as objects, the spatial dynamics of this study will overcome the dichotomy of geographic investigations stating that “there are two different views on what is important in producing “geography,” - one stressing people and human agency, and the other emphasizing the unseen structures that exert controls upon human activities” (Robinson, 1998: 420). The spatiality of discourse acts as “frameworks that embrace particular combinations of narrative, concepts, ideologies and signifying practices,

each relevant to a particular realm of social action (Barnes and Duncan in Robinson, 1998: 472).

2.1 Research Approach

The research is framed within an *actor network approach* and the resulting analysis will view relationships as being formed by unequal power, exchange values, and each actor's desire to position different positions and beliefs within the operation each network. Alternative agricultural commodity networks are therefore "actor-networks." Actor-network analysis being inherently open-ended, presents a methodological challenge to the researcher. To be framed within an actor-network, alternative agricultural commodity networks must be defined by specific *social-economic strategies*, which create a *network ordering*. *Peri-urban* agricultural actors are situated in dynamic spaces of global, national, and local objects. Discourse, ideas, knowledge, regulations and information are defined as *network objects*. All of the objects are managed, promoted and exchanged through *discourse coalitions*, together with powerful actors possessing *symbolic capital* act as *points of passage* between networks along *hybridized boundaries*. New information undergoes the process of *network object translation*, *mobilizing* practice and *displacing* the network. The conclusion of the research does not lead to a final analysis; rather it results in policy recommendations based on observable *trajectories* from historical points of reference within socially produced space.

Actor-network theory states that networks are ordered by the relative power relations (Brown, 2005: 33-38), conceived of in this dissertation as social-economic strategies. In this case, the agricultural commodity network is ordered by regulations and the social values behind them. The political and social discourse supporting specific regulations defines each network, shaping it, defining its unique spatiality within the larger commodity market in Chiang Mai. Network ordering allowed me to clearly define my units of analysis as specific economic, political, and social strategies constituting organic or safe vegetable commodity networks. The strategy, rather than an individual, social grouping, or coalition, satisfies the need of actor-network theory because it identifies a particular discourse, rather than the actors putting the discourse into practice.

Northern Thai farmers are undergoing many changes in livelihood and identity. In some cases, farmers are participating in “counter-hegemonic relations” with the state, using various discursive and at times forceful tactics. Operationalizing the farmer under some “essentializing” description based on external differentiation will lead to a loss of experience and understanding of the complexity of the social relations within the village community. If we accept that a new agenda has emerged whereby social and environmental issues have usurped the traditional discourse of domination, and that the “agrarian question as a discourse of the peasant has deteriorated within the national space”, breaking down the post-colonial hegemony of peasant classification (Yos Santasombat, 2008: 51-53), then peasants, or in this case, the farmer, can not be a representative unit of analysis. The farmer must be contextualized into a larger grouping, a collective strategy based on a social issue or identity. This research will bring the farmer into multi-scalar agricultural commodity networks of actors constituted by discourse defined by a particular regulatory strategy. The network becomes a symbolic representation of the economic aspect of social complexity. While this research acknowledges that the farmer’s lives are multifaceted, situated within a complexity of social, personal, political relationships, the research questions only direct themselves to the farmer as the producer of certified produce and therefore will limit it to the relationships necessary to reinforce the linkages between the farmer and the agricultural network. Therefore the unit of analysis will be defined by specific alternative agricultural regulations put into practice by actor-networks.

The concept of peri-urbanism, as the result of the discursive hybridization of urban-rural actor-networks, is basic to the understanding of this research which considers the affect of certification, as a form of discourse, as a means of creating and stabilizing agricultural commodity networks, leading to an emergent peri-urban livelihood based on economic flexibility and community culture. The conceptualization of what is global or local becomes blurred when they are viewed as dichotomies. The terms lose their relevance especially when applied to peri-urban situations, where the local and the global have become a hybrid blend of mixed occupation and hybrid lifestyles. These matters will be attended to in this research as the power relationships that develop through the exchange of network objects

between actor-networks. From this perspective, some networks can be observed as more connected to the global marketplace while others are more attached to the local community.

Discourse coalitions work within alternative agricultural “actor-networks” to develop, maintain, practice and promote the regulations specific to their network. These are the NGOs, the government agencies, farm groups, retailers, and all other groups of actors who agree upon and perpetuate the discourse. Whereas each of these coalitions exerts power, through the transmission of knowledge and the capital formation of markets, they also use symbolic power, in the form of symbolic capital, to maintain linkage and stabilize the network. This concept of symbolic capital will be used to operational social aspects of community culture.

Actor networks are bounded by discursive boundaries, which may be thought of as the limit of regulatory tolerance for acceptable practice. Once identified and arranged within the market space of Chiang Mai, the boundaries between each network can be readily observed. The boundaries are considered to be hybridized where they meet, creating regions of commonality, agreement, and likeness. Points of passage occur along hybridized boundaries where it is advantageous for one network to consider the use of the network objects of another.

The concept of the translation of network objects of discourse will be used to explain how ideas exchanged between alternative agricultural commodity networks, such as regulations and forms of agricultural practice, become transformed into unique practice. Commodity networks are constituted of actors with similar beliefs and ideologies making up discourse coalitions. The coalitions inside each network are permeable to ideas, called objects in actor-network theory. Objects are drawn into coalitions at various points of passage, such as district agricultural meetings, seminars, and conferences. Examples of these objects in this research are consumer attitudes of what constitutes safe or organic, specific regulations regarding agricultural production processes, and ideologies closely associated with organic farming, such as biodiversity and free trade. Usually an object will not be internalized and used by the entire network; neither will it be practiced in the same way as it was inside its network of origin. Instead, the appropriate object will be analyzed, evaluated, and translated, and thereafter mobilized into a practice suitable for use by the interested collations,

and perhaps even by the network as a whole. This research will use the concepts of discourse coalitions and translation to demonstrate how networks are transformed, displaced, and even break away by the appropriation of new information. (Figure 2.1)

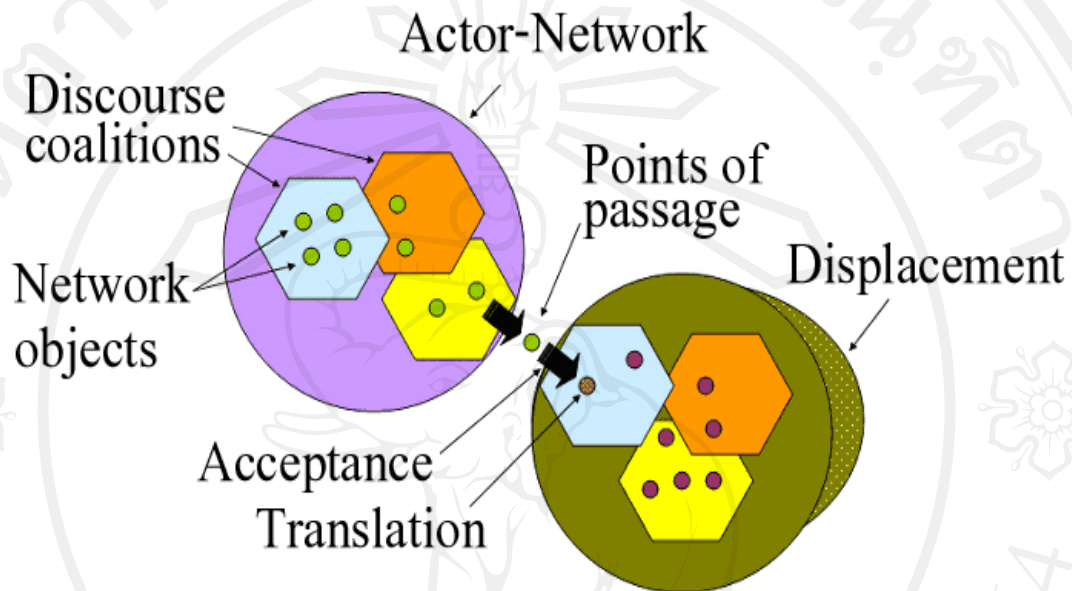


Figure 2.1 Conceptual framework of actor-network theory using discourse coalitions and network objects

This research will examine market spaces within the context of the social reproduction of space (Lefebvre, 1999). These spaces are easily recognized as places where produce is sold. Labels are typically used in these spaces to inform consumers about specific attributes of agricultural production, such as organic or pesticide free production processes, and other qualifiers, such as safety, fair trade, or freshness. The market space represents the certification. Market spaces, defined by discourse coalitions, compete for consumers along hybridized boundaries. Consumers engage in discursive practice (Foucault, 1972: 46) with retailers, being persuaded by the many qualities and social attributes projected onto the certification used in agricultural production. Network practices, quantified by empirical evidence, provide historical points of reference for future policy decisions. However, they can not only be represented as trajectories of practice. Alternative agricultural commodity networks are constantly changing as new actors emerge, old actors leave, new government policies are initiated, and consumer adopt new preferences.

2.2 Observation and reflexivity

I understand that observations become transformed when they are categorized and explained. The result is something new, a transformation of the original observation into an explanation of the processes observed (Massey, 2004: 82). I set out to avoid certain cultural “traps” such as “tourism” and “romanticism.” The first of these suggests that a researcher in new culture seeks to find differences and uniqueness. The second issue concerns avoiding making sweeping generalizations by being consumed by cultural differences. Both cases can be minimized by focusing on the everyday activities of those being observed (Silverman, 2001: 9-10). During my research I became aware of certain political situations between Bangkok and Chiang Mai. There are many different cultural practices in northern (*Lanna*) Thai compared to those of central (Bangkok) Thai people ranging from celebrations, foods, and even local language. There is also a long history of domination on the part of Bangkok over *Lanna* politics, traditions, and customs. I had to be sensitive about taking one side or the other.

Different contextual problems arose about what constitutes a family, a farm, or a village. As with the rejection of fixed, urban demarcations, I avoided using individualized demographic units of analysis in favor of conceptual strategies, particularly the regulatory processes for organic agricultural. There were different associations to be accounted for, such as formal farm groups and farmers belonging to corporate cooperatives. These problems were minimized by placing them into actor-networks and observing the flow of relationships and power as everyday practice. By focusing on strategies I could situate all of the actors into commodity networks.

Other contextual problems occurred while attempting to operationalize unique aspects of Thai culture related to the interpersonal relations between actors within the agricultural commodity network. The literature in English is mostly represented by foreign writers who tend to talk mostly about patron-client relations, reducing the whole of Thai interpersonal affairs to simple categories of obligation and dominance. Thai literature, written in English is sparse, though rich in its assessment of the importance of Buddhism to Thai culture. The problem was in reconciling the importance of non-material Thai goals with the historical-materialism associated with

Western literature, particularly with actor-networks and other post-modern theory, such as the concepts of social and symbolic capital and the production of social spaces. A detailed discussion about this issue and its conceptualization as used in this dissertation is presented in chapter III.

Another concern for me, as a foreigner studying in Thailand, had to do with the authenticity of authorship. This was pointed out to me by my advisor, Dr. Chusak Wittayapak, when I began to make use of a book by Niels Mulder about Thai people. He wondered why I did not look at the work of Thai authors. I made a point to direct my research to find the Thai scholar first. Though I do not want to elaborate in depth the distinctions between Thai and foreign descriptions of Thai culture, I think it is evident to anyone researching the social sciences that Thai express their culture differently than a foreigner. A perusal of the bibliography will show that I have been diligent in finding Thai sources. In fact, there is a substantial body of literature in English written by Thai scholars. Most of the literature about food preferences is in Thai language. Fortunately, one of the key texts was written by the project manager of MCC who I had direct access to (Puongmanee Jatarong, 2007). Also, the Special Collections librarian of the CMU library was overseeing a university sponsored website on local *Lanna* foods. In some cases, the only literature available was in Thai language. In those cases I turned to those who would help for translation and understanding.

This dissertation situates itself within a space of neutral language. Terms such as “indigenous” will not be applied to practices or materials such as knowledge or vegetables. Instead, the term “local” will be used to describe a range of native plant species grown or collected by farmers around Chiang Mai. There are many terms used in Western literature that carry with them the connotation of being foreign or “not Western.” They present an “otherness” similarly expressed with the way Bangkok describes the surrounding provinces. This dissertation acknowledges that regions and situations not fully circumscribed by the global ideal become denigrated through descriptive terminology. Not so long ago Bangkok princes described *Lanna* people as “black belly Thai,” Western oriented writers call open air, fresh markets laden with recently harvested vegetables as “wet,” and farmers living in the

mountainous regions of Northern Thailand as “hill tribe” people⁷. This dissertation will use meaningful, descriptive, and positive terminology to describe the cultural attributes of Chiang Mai.

Neutral language helps the analysis to avoid unnecessary value judgments. Actor-networks can be described as the outcome being a dynamic understanding of complex interactions, a way of sorting power, causality, and consequence, not as a priori assumptions of value-laden causality. However, by attempting to be completely objective research can take on a relativistic outlook. However the approach does not state that all practice is right, but that people do things for many different reasons, what is right to one may be wrong to another. We are led to believe that structures and agency are different words, as if a social existence is independent of individual practice. By changing the belief in a deterministic understanding of the individual and cosmos based on right and wrong into an understanding of the individual as the result of practice and consequence, the methodological approach of actor network theory seeks only to explain what is, not what should be. It searches for the proper questions for understanding, not the right answers contingent on institutional powers and prevailing social mores. This dissertation, while clearly stating that it seeks to evaluate alternative forms of agriculture by looking at the power relations between neoliberal and local forces has already suggested a biased toward local production. However, as the chapters unfold it is hoped that the reader will observe that this is a critical analysis and that idyllic and romanticized notions of village life are clearly pointed out as fallacy.

The categorization of agricultural processes was complicated by their proliferation and misrepresentation. The use of the term organic is not strictly regulated in Thailand. The logo, “Organic Thailand” is used to represent vegetables grown using pesticide-reduced processes. Farmers belonging to ISAC do not use pesticides at all, but their products can not be officially labeled as organic for international markets because they are not certified by an internationally recognized organization. To compensate for the variations of agricultural processes I used specific language to indicate that farmers were using “pesticide free,” “pesticide

⁷ Commonly referred to as “Hilltribe,” these are ethnic groups found in the mountain regions of Thailand.

reduced,” or IFOAM certified processes, the latter representing internationally accepted organic standards, in addition to safe agricultural production.

2.3 Empirical Methods

Qualitative and quantitative spatial and non-spatial information was gathered to understand the geographic events of safe agriculture commodity networks. Qualitative data, mostly in the form of interviews, provided cultural understanding of the observed world. The personal interviews, stories, and insights given to me by farmers, NGO leaders, business and government leaders, as well as interviewees knowledgeable of *Lanna* customs provided me with the insight to go further into this investigation. Quantitative data, from surveys, census data and other forms of calculation provided practical and verifiable facts, comparable to facts collected over different periods of time (Robinson, 1998:479). Quantifiable data helps to verify the qualitative, as the qualitative data gives meaning to observable facts. Together they round out an investigation, bringing practice together with outcomes.

2.3.1 Preliminary research

At the very start of my research I visited some of largest certified farms and distributors in Thailand. I traveled on motorcycle to Swift Farms headquarters in Nakorn Pathon and Swift Farm asparagus farmers in Sakeao, Greenet headquarters and Green Market headquarters, “Organic Thailand” in Lop Buri, and Mae Tha Farm group in Mae Tha, Lampang. Each of these represents a pattern of organization and ideology which will be used for comparison. This information also allowed me to understand how to use different regulatory standards as network strategies which became the fundamental unit of analysis for this investigation.

I began preliminary research in the form of field interviews and site inspections using a GPS in order to plot the locations of certified farmers. My thought was that there would be some kind of pattern involving attributes such as location to major transportation corridors, land use patterns, or perhaps concentrations in certain *amphoes*. This did not prove to be the case. There is a slight correspondence of farm sites and proximity to major corridors, but there are so many factors to account for location, including the village locations and the width of the

valleys. After the data was mapped it became clear that there was no specific pattern based on physical location. What did become clear was that almost all farming occurs outside of the central urban area and areas of rapid urban development. The two major causes of this are that the opportunity cost to sell the farm land for development far outweighs any other factor in staying. This further accentuated by the fact that urban development disrupts farm use patterns, irrigation supplies, water tables, and other linkages necessary to conduct farming. Farms are often completely cut off from water and even road access.

GPS data collected at the farm sites was useful in understanding the lack of spatial patterning certified farms. This is not to say that certified farming is aspatial. GPS data establishes a range of farm activities suggesting how far is “too far” to drive vegetables to the city market and how close is “too close” to urban areas. As mentioned earlier, small vegetable farms are located outside of the city, where access to irrigation water is still available but yet no further out than about 25 km, before the mountain pass to Chiang Dao in the north and not farther south than Saraphi, or Lamphun.

2.3.2 Study area

It became clear that the farmers within the scope of my study are scattered outside the urban areas of Chiang Mai without any apparent pattern. (Figure 2.2) However, the one attribute shared by these farmers is that they all belong to a farm group. Each farm group is distinguished by their organization and goals. I asked questions to identify the mechanisms defining these relationships to understand the influence of power between actors.

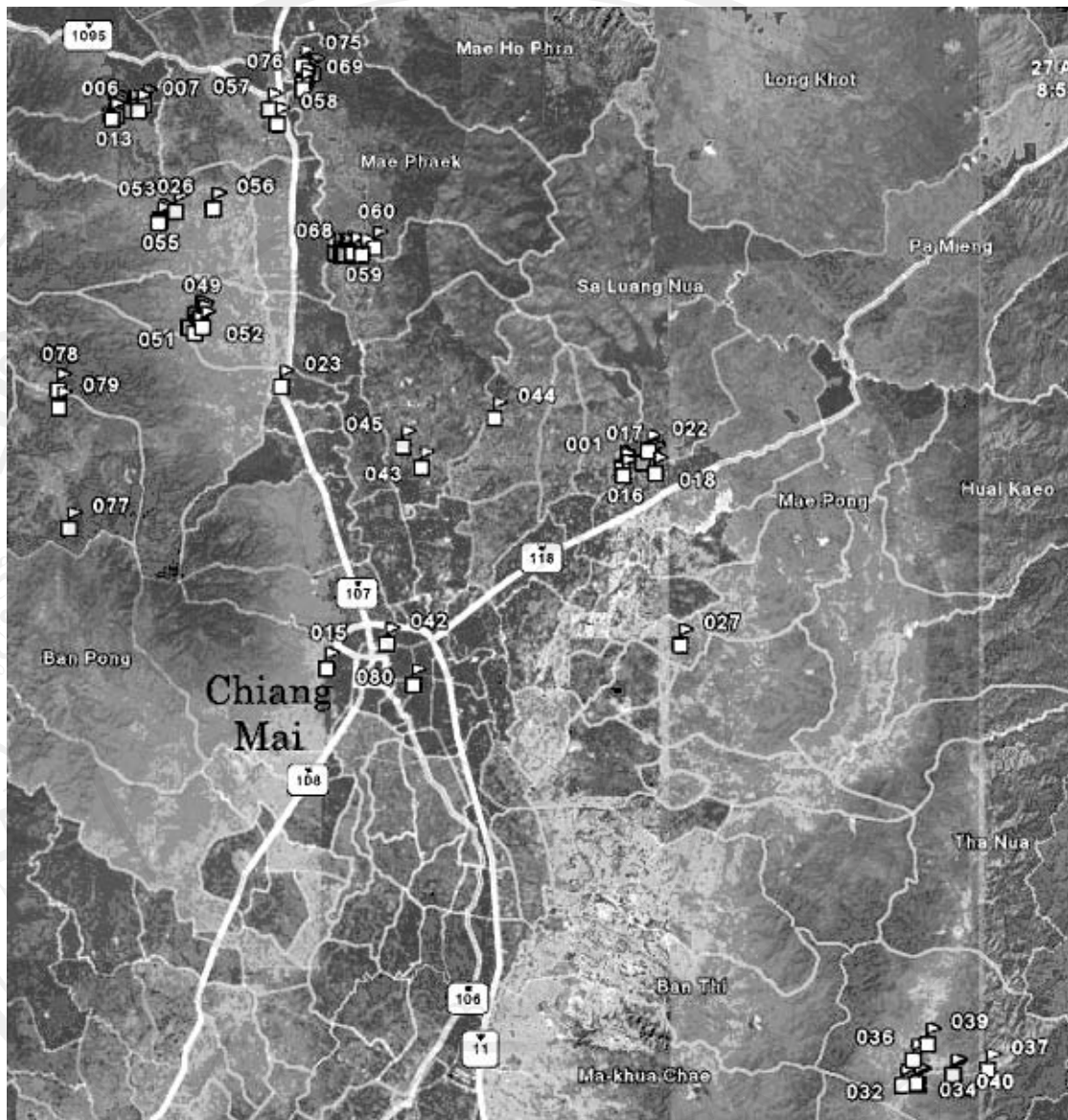


Figure 2.2 Extent of Chiang Mai certified farmers

My study area was the range of farms associated with MCC, ISAC, or certified through the *amphoe* offices of Hang Dong, Saraphi, Muang, Mae Rim, Mae Taeng, Doi Saket, San Kamphaeng, and San Sai. (Figure 2.3) At first I was concerned about the number of farms to be observed in the scope of my research. In fact, the number of certified farms around Chiang Mai is not large at all. Though the area is vast for individual research, the number of farmers falling into these criteria is relatively few, at that time around 625 registered farmers. I derived this number from the total number of farmers reported by ISAC, MCC, and the offices of agricultural extension. The largest groups of farmers belonged to MCC and ISAC, reporting

approximately 250 farmers in their network. Private farm groups make up an additional 125 farmers. (Table 2.1) The smaller groups are all registered with the *amphoe* agricultural offices. I further limited the scope of the dissertation to include only those farmers whose produce was sold in Chiang Mai. This limitation also concentrated the focus of research on Chiang Mai residents. An unintended consequence of this limitation was to expose the importance of local vegetables. Grouping farmers by strategy, and, as it turned out, by organization, made it possible identify all of the farmers and their locations. I was also able to note clear differences in organizational administration and policy. When farmers choose to participate in a strategy leading to agricultural certification, the organization overseeing the farm group(s) and the procedures leading to certification establish a vegetable commodity network.

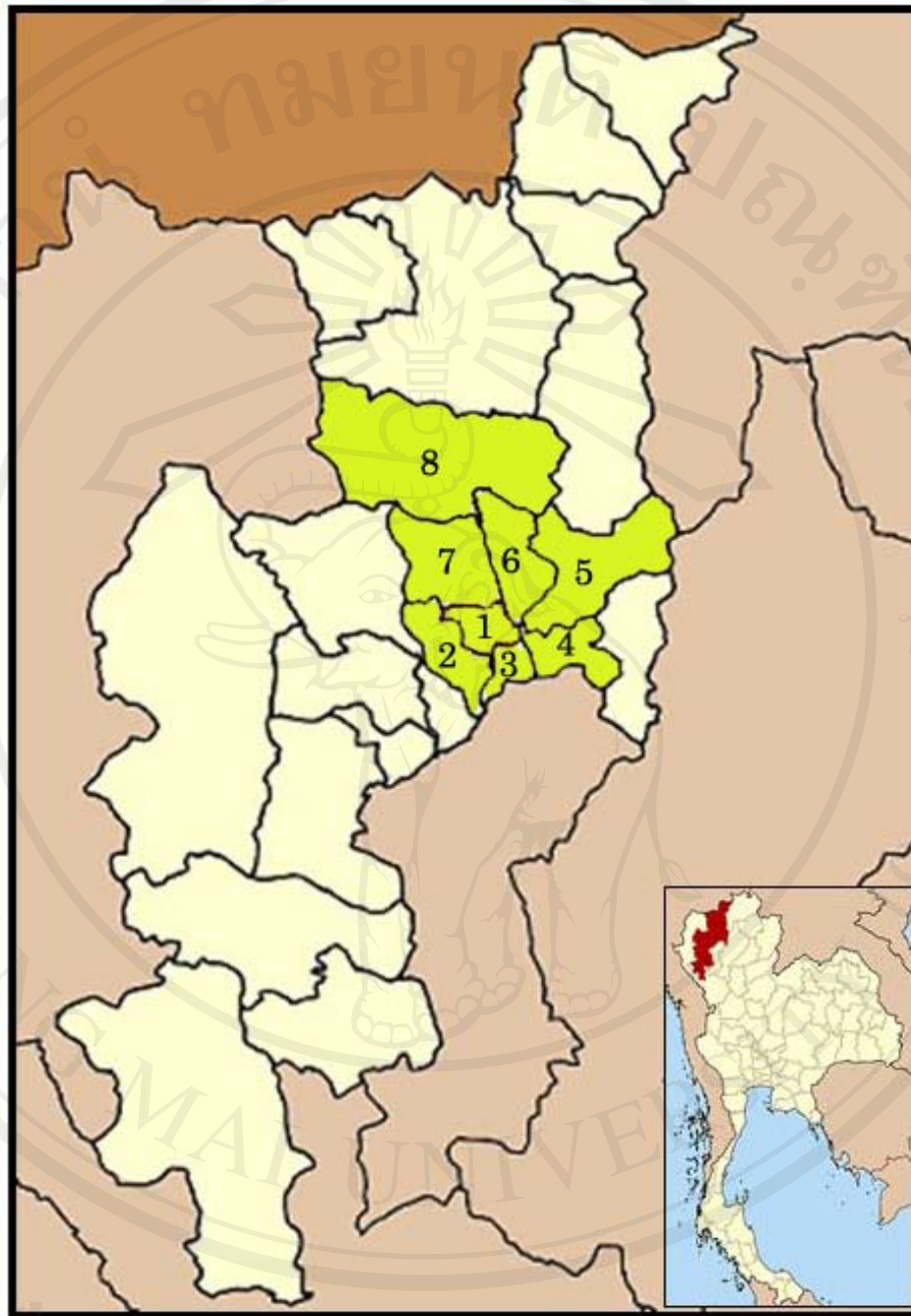


Figure 2.3 Map of *amphoe* investigated in *changwat* Chiangmai

- | | | |
|--------------|------------------|--------------|
| 1. Muang | 4. San Kamphaeng | 7. Mae Rim |
| 2. Hang Dong | 5. Doi Saket | 8. Mae Taeng |
| 3. Saraphi | 6. San Sai | |

Table 2.1 Independent farm groups around Chiang Mai

Farm Leader	Market	Location	F armers
“JW”	Contract	San Kamphaeng	1 0
Khun Pak Sod	Fresh market table	San Sai	2 0
Kampan Farm	Contract and MCC	San Sai	4 0
Khun “DD”	San Sai Hospital	San Sai	7
Kasem Farm	RPF market table	Saraphi	1
“DTT”	Fresh market table	Saraphi	2
“NN”	Demonstration Markets and Contract	Saraphi	4 5
Total			1 25

Early on in this investigation I chose to eliminate Royal Project Foundation (RPF) farmers from the scope of the research. The obvious problem in doing so is that RPF is literally the “elephant in the room.” Almost all certified agriculture in the north was first promoted by RPF. Also, the majority of certified produce available in Chiang Mai comes from RPF. Complicating matters is RPF’s primary mission is not to develop certified, organic agriculture. Instead, RPF is subsidized to eradicate opium production and encourage the integration of highland groups into the Thai nation-state. This factor distinguishes it from certified agriculture around Chiang Mai. RPF’s high level of subsidization has allowed it to establish vast networks of highland collection centers throughout the mountainous portions of Northern Thailand. (Figures 2.4 and 2.5) RPF will is included as an alternative, certified agricultural network influencing the cost, pricing, marketing, and regulations of the other networks being observed.

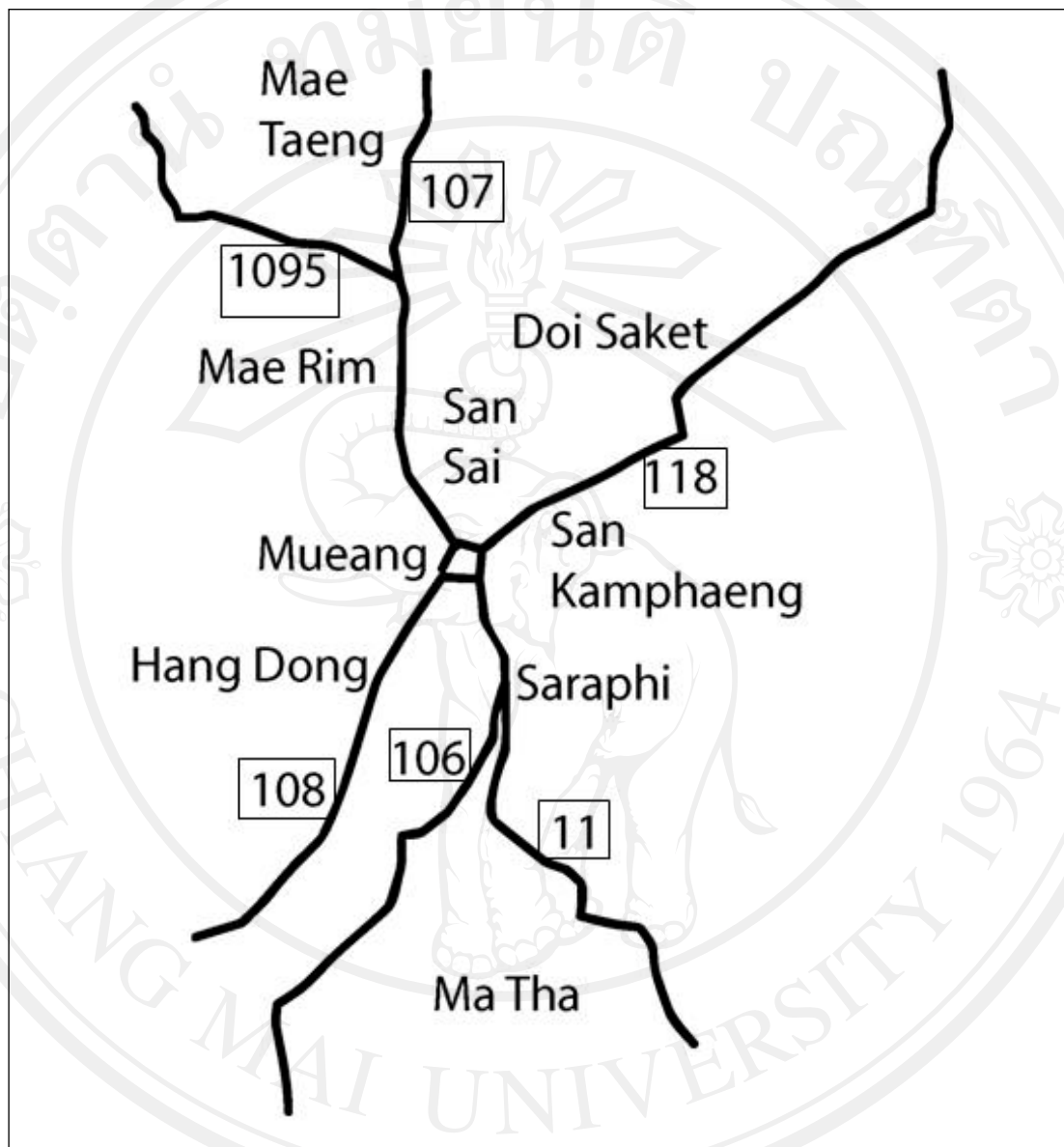


Figure 2.4 Highways in the study area

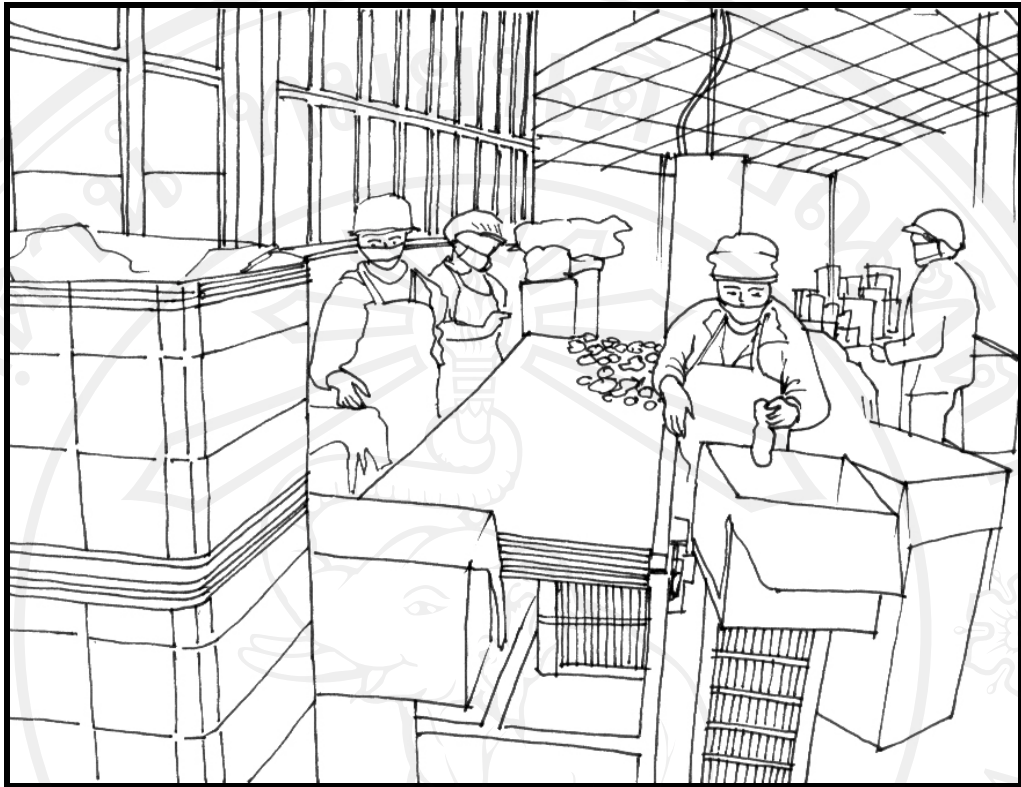


Figure 2.5 Royal Project Foundation collection center in Mae Rim

2.3.3 Data collection procedures

My research used quantitative and qualitative data to understand the social and cultural construction of quantifiable facts (Silverman, 2001: 40). Data collection and record keeping was systematic. A set of procedures and questions was developed and used during all field interviews and site inspections. I coordinated with the various translators provided by each certifying body and with those I hired for independent follow-up research. Overall, the research was appropriate to the questions being studied. The connection between research and theory is clearly described throughout each chapter. The findings of the field work were used to explain the data, not the other way around. The evidence presented in from my research have been fully discussed, the concepts used and categorizations assumed have been fully explained. I kept in mind that all data is an interpretation of the observer. I take Latour's position that the act of gathering data itself projects an opinion and world-view onto the subject of investigation.

Collecting data regarding the ordering of different networks operating in Chiang Mai involved identifying the different certifying bodies, regulatory agencies, and agricultural office and categorizing them by agricultural production practice. Once categorized, field investigation was conducted to meet, interview, and assess the farming practices of farm groups within each commodity network. Interviews and inspections of farms, *amphoe* headquarters and markets not associated with MCC or ISAC were done with “Khun Pak Sod”, a farm leader of the San Sai farm group. Her name will come up often as a key representative of what will be described later as the “private approach.” Follow-ups to MCC and ISAC farmers were done with “Nong,” a *Lanna* speaking farmer with MCC. Nong helped me to informally visit and interview farmers without the oversight of ISAC or MCC.

In total, I spent 35 non-consecutive days in the field with Khun Pak Good, Ann, Nong and Khun Pak Sod, from May 11, 2007 until June 3, 2008, interviewing farmers, farm leaders, and *amphoe* level officials. (These days do not include my weekly visits to ISAC and MCC markets collecting information about vegetables from May until December 2007). I made visual observations and asked additional questions about what I observed. Khun Pak Sod’s familiarity with *amphoe* agriculture, commonly referred to as *Kaset*⁸, gave her the ability to open the doors of every *amphoe* agricultural office in my study area, allowing me to access the records of certified farmers and farm leaders and assisted with interviews with RFP officials. She also helped me to identify the many local vegetables available in the markets. Interviews were conducted with farmers, farm leaders, *amphoe* agricultural leaders, and lead personnel in MCC, ISAC, and RPF, directors of certified agricultural organizations in Thailand, as well as other leaders in the field of certified agriculture in Thailand. Interviews were conducted by me in English when possible, and in Thai or *Lanna* language with an interpreter when the interviewee was not conversant in English.

I personally visited over 100 farm sites to verify the agricultural production processes claimed by farm group leaders, NGO’s, government agencies and

⁸ *Kaset* is the Thai word for agriculture and is commonly used to refer to the agricultural extension office by Thai farmers and farm leaders.

corporations. I took photos at each site, numbering them and writing specific details in my log book for future reference. A GPS waypoint was taken at each location, with accuracy ranging from 15 to 40 meters, depending on cloud cover.

While at each site I looked for evidence of pesticide use which inadvertently led to one of my first insights into Thai interpretation of organic. While at a “Safety Vegetable” site I noticed many empty bottles of the insecticide malthion. Previously, I had been told the site was organic. When questioned about the bottles the leader informed me that malthion was used during the first weeks of growth. This was followed by a lengthy discussion about the meaning of organic. I came away from the meeting understanding that Thai people, in general, do not have a rigid meaning for the English word organic. I used this insight to develop the consumer survey which verified my understanding.

My encounters with farmers, group leaders, officials, and NGO workers were filled with social protocols unfamiliar to me. Fieldwork has been described as a form of engagement with inherent variability in power relationships (Massey, 2005). Understanding and interpretation were co-fabricated between researcher, interpreter, and subject (Whatmore 2004:93). That is, there was always some uncertainty on the part of the questioner and the subject as to what was being said. I am not a native Thai speaker. Furthermore, people in Northern Thailand speak the *Lanna* dialect of Thai language. *Lanna* language distinguishes a person as being part of *Lanna* culture instead of other cultural groups in Thailand. Being able to communicate in *Lanna* language brings down many walls of formality presented to those who use the official language of the government. Knowing this, I only sought out native *Lanna* speakers to assist me in field study.

I developed field questions with the help of the field coordinator for ISAC named “Khun Pak Good.” She had assisted many other researchers in the past, including the inspectors from OXFAM. Khun Pak Good knew the range of questions suitable for ISAC farmers and what they would feel comfortable answering. Her long-term experience in training farmers and her familiarity with *Lanna* language helped me to ask the questions politely and respectfully. Similar interviews with MCC farmers were done with “Ann” a field representative and instructor under the direction of the project manager of MCC. Using transliterations, I asked the questions myself,

though my translators often provided assistance with understanding my pronunciation. I believe that my sincere attempt in asking, as well as the farmers' familiarity with the interpreters, helped everyone relax and enjoy the interviews. At times I had the opportunity to ask more specific questions, probing more deeply for understanding (Robinson, 1998: 414). Questions, such as "How do you make organic fertilizer," "Which crops make more money?" or "Where else do you sell vegetables?" had already been rehearsed. These questions are listed in the appendices. Attention was paid to relevant details about farming and local technical terms.

Stories of local farmers and farm group leaders are helpful in understanding the basic agreements and structure of certified vegetable commodity networks. The stories told come from personal interviews acquired during field research. The personal stories I was told are only interpretations of what the farmers and community leaders originally intended to say. I believe that my interpreters did their best to maintain as much of the original meaning as possible. I always traveled with native *Lanna* speakers to keep the conversations in local language. It was often confided to me that farmers preferred to communicate in the local vernacular as was their custom among one another. The stories gathered mingle together the primary actors involved, their interpersonal relationships, and their problems with the government. Chiang Mai's certified networks are intertwined; they developed around the same time as new policies were being implemented for the promotion of alternative agriculture⁹. The stories provide insight for further investigation of archival and quantitative data to verify their accuracy.

2.3.4 Key informant interviews

Following back down the distribution side of the network, assemblers and markets were identified to understand the distribution side of the networks. Traveling with an interpreter, I went to each of the district agricultural offices encompassing the study area and met with the directors of agricultural extension. These meetings were

⁹ I have used the term safe agricultural production to embody the meaning of alternative agriculture to emphasize that fact that organic and other forms of pesticide regulated agriculture should not be referred to as an alternative, but as a production process in its own right.

generally informal and the district officers were very helpful. District personally directed me to the locations of district-sponsored projects, providing statistical data on the numbers of certified farmers, and provided personal commentary on the efficacy of programs. The same atmosphere of candor was offered by the field headquarters of NGOs and university staff in Chiang Mai. Interviewees were willing to share the highlights of their programs and direct me to others who could be of more assistance.

Meetings with NGO leaders, Royal Project Foundation officials, and corporate officials, particularly in Bangkok, required fixed appointments and were generally limited to less than one hour. These interviews were more formal, and usually the information gathered was more of a verbal expression of policy rather than a personal insight. However, these meetings were always conducted in English, allowing me the ability to interpret the language and style used, as well as first-hand understanding of the information being presented.

I did not limit myself to only agricultural actors in my investigation, particularly pertaining to Thai culture. I sought out the help of Bhikku Nirodho, an English speaking monk at Wat U-mong in Chiang Mai. Bikkhu Nirodho, a citizen of Australia, has been an ordained monk in Thailand, practicing for almost 30 years. He helped to explain in English certain concepts, such as *krengchai*¹⁰, *barami*, and merit, which helped me to look past the obvious and into the meaning behind many practices. I believe that the assistance and insight given to me by these individuals made my research possible by helping me to overcome my deep sense of Western orientation.

I also had the good fortune to interview Dr. Chou Duang Duan na Chiang Mai, one of the last members of the royalty of the former Kingdom of *Lanna* and symbolic (if not actual) leader of Chiang Mai's cultural heritage. Her insights into *Lanna* culture gave me a first-hand experience with the beliefs and feelings of those who practice *Lanna* customs in their daily life. Her political expressions helped me to understand the tension between the traditional customs and cultural affects in Chiang Mai, and the forces of Thai nationalism and global values being promoted in the

¹⁰ *Krengchai* is the respect shown between Thais based on unequal power relations. *Krengchai* is the idea of living without having ones emotions disturbed unnecessarily. (UNESCO, 2008). However, *krengchai* may also be described as situational, directly relating to the context in which it is used. Situational examples of *krengchai* will be described throughout the text.

province. I learned that in general, Thais born and raised in Chiang Mai are proud of and want to preserve *Lanna* culture. At the same time, people in Chiang Mai are also proud of Thai accomplishments and are concerned with the overall development of Thailand, as well as desire to participate in global culture and be seen by others as modern and contemporary in outlook and fashion. These insights fit well with the actor-network model of network-object exchange, translation, and displacement.

2.3.5 Market Survey

I developed a market survey to establish the needs, preferences, locations, and ages of Thai consumers in Chiang Mai as seen in the appendices. The main purpose of the survey was to understand the consumer awareness of safe and organic agriculture and to identify the consumer components of certified agricultural commodity networks in Chiang Mai. The survey was administered to 324 residents of Chiang Mai. I coached the interviewers giving the questionnaire about my specific expectation in administering the questionnaires. The interviewing times and locations were scheduled in advance. I specifically requested that my interviewers attempt to ask as broad a range of Thai shoppers, and to not be shy of older people. The answers to the questions were mostly fixed, or put in terms of how many times, days, etc., to limit the decisions of the interviewees and reduce the time to administer the survey (Silverman, 2001:239). The results of the interviews, inspections, and surveys were mapped and statistically analyzed for spatial patterns and descriptive statistics.

The content of the survey was designed to evaluate three specific behaviors and attitudes of northern Thai consumers. First, the survey sought to quantify consumer demand for certified vegetables, as well as to differentiate between local and introduced vegetable preference. Second, specific survey questions were asked so as to determine the degree to which consumers understand the difference of different certification strategies and labeling practices. Finally, the survey sought to establish the relative degree of trust consumers hold for different labels, certifications, and market venues. The survey was structured using both multiple choice questions and ranking formats so to make the survey timely enough to administer to passers by.

The survey was conducted during the months of June and July in 2008. It was administered at seven different venues representing the most common retail

locations selling certified or alternative vegetables. These were the Tesco-Lotus and Carrefour supermarkets, the Rimping Supermarket near the airport and Tops Supermarket in the center of the city, Surriwattana fresh market, in the center of the city, with known certified vegetable vendors, and at the MCC and ISAC communities markets. Two senior level, undergraduate students were selected from Chiang Mai University based on both their fluency in English and *Kan Muang*, the language of northern Thai people. Knowledge of *Kan Muang* was found to be essential during previous field research because of the trust engendered from speaking in local dialect. Before data collection commenced, the two students were trained in both data collection techniques, as well as to develop their coherency of the questions. The interviewers were instructed to find, to the best of their ability, an equal proportion of men and women of all ages as each venue would permit. In total, 320 surveys were completed. The data from the surveys was entered into MS Excel for statistical processing. The data was aggregated by age, venue, and trust. The results used in this analysis were graphed for direct comparison.

2.3.6 Literature and statistics

There is an abundance of literature in English about organic agriculture in Thailand, though it is most situated in Bangkok area. Information written about organic agriculture in Chiang Mai is limited to NGO reports, or university research written in Thai language. Much has also been written in English about Thai culture, mostly by foreign researchers. Most of this literature, including the English literature written by Thais, focuses on the generalized role of patronage in Thai relations. I found only one literary source, written by Amara Pongsapich in Thai, which provided in-depth discussion about the relevance of Thai cultural relations set within the everyday Buddhist cosmology of Thai people. Other sources about Thai personal relationships did not provide the cultural insights as experienced by Thai.

The literature used in my research had many biases depending on the institutions sponsoring the writing. FAO and European literature tended to be critical of organic regulation in Thailand, as well as Asia in general. Thai based literature tended to be very supportive of the Thai regulatory efforts as overseen by the particular institution in question, but also often neglected other institutions doing

similar practices. Much of the contradictory statements were resolved when I located a document written at the inception of organic practices in Thailand. The particular document described the early efforts of IFOAM in Thailand and how different organizations were designing their organic practices. The document has little institutional bias as it was written before the institutions developed rivalries and contests of power had not yet emerged (Thiprad Maneelert, 1999). Finally, I approached the issue of multiple regulations and production processes from the view that no one was absolutely right or wrong.

Additional assistance was given by Special Collections director of the Chiang Mai University (CMU) Library regarding local vegetables. Certain propensities, such as Northern Thai peoples taste for local vegetables and foods, as well as a historic association with fresh markets was necessary for understanding marketplace data. Documents collected for this dissertation include historical studies of Thailand, Chiang Mai, and the customs, traditions, and foods of *Lanna* people. Other documents include descriptions of agricultural regulations and certifications, statistical data concerning farmers, farm groups, farm production, seasonality and information regarding the physical geography of Chiang Mai.

Official statistical records from the Thai census bureau were used in making generalizations about farm size, income, and the use of pesticides. Some problems were encountered, such as the groupings used by the government. The National Statistics Office of Thailand provides agricultural data, downloadable in Excel format, from its website. Other sources of statistics include NGO reports and commissioned studies.

Since 1992 there have been many different kinds of vegetable certifications in Thailand. (Appendix A) Of these, “Safety Vegetable” and GAP are available in retail markets. However, there are other un-official vegetable certifications. My research defines vegetable certification in terms of consumer trust, third party oversight and/or government accreditation. The officially accredited certifications by Thai ministries available in markets in Chiang Mai are “Safety Vegetable”, GAP, and Queens Project vegetables in Chiang Mai. I organized all of these different types of regulation into general categories defined as organic, pesticide free, pesticide reduced, and uncertified.

2.4 Conclusion

The use of an actor-network approach allowed me to situate multiple scales of power, diverse social groupings, and competing networks into a framework of analysis in which to analyze the development of the unique certified, agricultural commodity networks in Chiang Mai. I used the concept of network objects in the examination of certifications, grouping actors into discourse coalitions and describing their activities as discursive practice, explaining the interface between retailers and consumers as hybridized boundaries and the role of spatial labeling in communicating information, and the role of translation as the central mechanism in establishing certified commodity networks. These concepts, as state by the three research questions, will be thoroughly utilized in detailed analysis of the situations they describe. Overall, the approach and methodology used in this investigation met the objective of understanding the strategies used by Northern Thai farmers by situating the research in the *Lanna* world-view. The research utilized Thai resources and Thai perspective. A wide variety of methods were used requiring me to interact directly with farmers, organizers, leaders, and experts, from whom I gathered data, conducted interviews and survey information, and conducted site inspection, to verify the literature and obtain the level of detail that only first-hand experience can provide. The fact that I have spent over two years in the study environment engaged with the farm leaders and directors of the various organizations has further contributed to my understanding of the circumstances around the farmer and the specifics of certified farming in Northern Thailand. The data gathered in my research is here compiled into an extensive source of information for future review and analysis. I hope that future investigators can use this dissertation to help in their investigations concerning certification and farmers around Chiang Mai.