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Resisting Agricultural Assimilation: The Political Ecology of Hmong Growers in the Twin Cities Metropolitan Region

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Resisting Agricultural Assimilation:
The Political Ecology of Hmong Growers
in the Twin Cities Metropolitan Area

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April 30, 2007

Honors Project
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A Political Ecology of Hmong Growers in the Twin Cities Metropolitan Region

Abstract

Over one and a half million Hmong refugees have arrived in the United States since the end of the “Secret War” in 1974. The Saint Paul and Minneapolis metropolitan area is home to the largest urban population of Hmong immigrants in the United States. A significant number of Hmong refugees living in the Twin Cities metropolitan area have chosen farming as both a primary and supplemental source of income. While living in the metro area many Hmong rent land in peri-urban areas to farm and subsequently sell at local markets. Employing a cultural and political ecology framework, this research critically examines this phenomenon. By exploring farming in the context of assimilation theory, the socio-economic forces as well as the cultural and historical forces that bring these refugees to farm are uncovered. Additionally, this research reveals the agricultural systems and marketing strategies employed by Hmong growers. These techniques have enabled Hmong farmers to resist the pressure from organizations assisting them to adopt western agricultural techniques, and thus avoid agricultural assimilation.

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Introduction

When Hmong military leader, General Vang Pao, came from Laos to America, he had concerns about how the Hmong people would adjust to life in the United States. “Right from the start, I tell the American government that we need a little bit of land where we can grow vegetables and build homes like in Laos...I tell them it does not have to be the best land, just a little land where we can live” (Fadiman 1999, 183). The Hmong, a hilltribe people from Laos, were subsistence swidden agriculturalists. As a result of the “Secret War” in Laos, the Hmong people were uprooted. In the mid-1970s, Hmong refugees began to arrive in the United States. Since then, over 40,700 Hmong refugees have settled in the Twin Cities metropolitan area, making this area home to the largest urban concentration of Hmong residents.

As refugees to the United States, the Hmong were expected to adapt to living in a radically different environment with limited support. The primary goal of the United States government is to assist refugees in assimilating through economic self-sufficiency. “Achieving economic self-sufficiency is the cornerstone of the U.S. resettlement program and getting a job is the first step towards that goal” (UNHCR 2004). Language and cultural barriers made entry into the job market difficult and thus, achieving economic self-sufficiency very difficult for many Hmong people initially.

In a quest to connect to their past and provide food for their families, many Hmong people began to cultivate small garden plots immediately upon their arrival in the United States. In the Twin Cities, many people expanded these projects by renting land to farm in the metropolitan area and selling their produce at local farmers markets. In an attempt to be self-sufficient, many Hmong in the Twin Cities metropolitan region have adapted their

agricultural livelihood from the isolated highlands of Laos to a bustling metropolitan region in the United States. Experts estimate there are now anywhere from 100 to 300 Hmong producers¹ farming for profit in the Twin Cities metropolitan area. Their presence has changed the farming landscape in the metro area.

In this paper, I ask four primary research questions. First, what factors have influenced Hmong growers' decision to farm? Second, what farming practices and techniques are Hmong growers employing? Third, where do Hmong growers market their produce and what marketing strategies do they utilize? Lastly, what type of structural support have Hmong growers received?

This paper has two main objectives which both directly related to the research questions posed in this study. The first objective, which is primarily descriptive in nature, is to illustrate the motivations behind farming as well as the production and marketing strategies and analyze the main barriers farmers face in each of these stages of the farming process. The second objective is to demonstrate how Hmong growers have adapted their traditional agricultural practices to a new environment and resisted the pressure, from organizations assisting them, to adopt conventional, western agricultural techniques. I will use the theoretical lenses provided by assimilation theory, cultural and political ecology to ground this research.

This paper will commence with a discussion of the methods used in this study, background on the Hmong people and a review of the literature that outlines the key theories grounding this research. Discussion of the Hmong farming experience is broken into three chapters, each relating directly to a particular research question: I. *The Decision to Farm* II. *The Practice of Farming* III. *Markets and Marketing Strategies*. Each of these chapters will

¹ Throughout the entirety of this paper, I will refer to Hmong producers as “growers”, “farmers” and “producers” interchangeably.

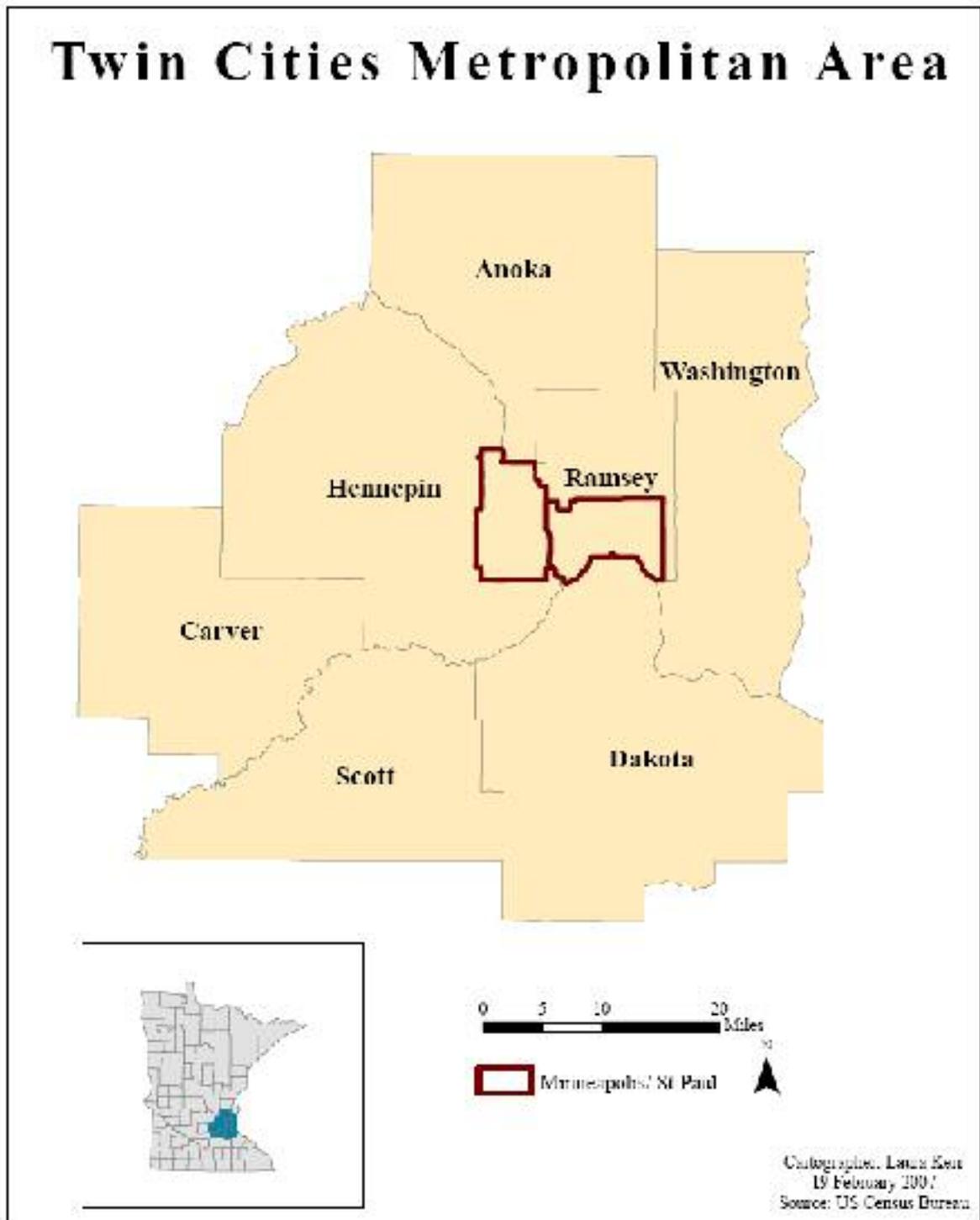
consist of a findings section, based on fieldwork completed in fall 2006 and an analysis section in which barriers to success and institutional support at each particular stage is discussed. I conclude with policy recommendations.

Methodology

To gain an understanding of the Hmong farmer experience in the Twin Cities metropolitan region, numerous research methods were employed. First, an understanding of the experience of Hmong refugees prior to living in the United States was of the utmost importance to this study. To gain this historical context, anthropological and historical works on the Hmong were studied extensively. The Hmong have been frequently misrepresented in this historical literature. To ensure historical accuracy, I relied heavily on works recommended by individuals at the Hmong Cultural Center in Saint Paul, Minnesota and the Hmong collection at Hamline University. I used fieldwork to gain a perspective on the present day Hmong farmer experience in the Twin Cities metropolitan region.

Study Area

The study area of this research is the Twin Cities metropolitan region, also referred to as the Minneapolis and Saint Paul metropolitan area. For simplicity sake, throughout this paper, I will refer to this region as the Twin Cities. While the majority of participants in this study lived and sold produce within the city limits of Saint Paul or Minneapolis, the farms where the produce is grown are outside of city limits. This study was contained to the metropolitan region, comprised of seven counties: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties.



Map 1: Map of Study Area

The farms of the Hmong growers who participated in this study are all in the metropolitan area. This study is limited to this specific region. However, there are Hmong farmers who live and sell their produce within this region but farm outside of the study area. There are also farmers who have moved out of this region and farm outside this region while still selling their produce within the Twin Cities. These two patterns have emerged as distinct spatial trends. While these trends will be noted, they are beyond the scope of this study.

Exploratory Work

To inform my study of Hmong farmers in the Twin Cities metropolitan region, I began by doing background research. This research is referred to as exploratory work by methodology scholars (Hay 2005). The purpose of this research is to provide the background necessary to commence fieldwork. Exploratory work on the history of the Hmong in Southeast Asia, the refugee experience, as well as the Hmong experience in Minnesota greatly informed this study. To find this information, I relied on historical and current scholarship as well as informants at the Hmong Cultural Center in Saint Paul, Minnesota.

Data Collection

Estimates of the number of Hmong farmers in the Twin Cities metropolitan region vary greatly. Estimates given by participants in this study of the number of Hmong farmers ranged from 100 to 400. The most reoccurring and seemingly accurate estimates are approximately 100 to 300 farmers. This lack of data on the number of Hmong farmers in the Twin Cities metropolitan region is representative of the absence of data on all aspects of Hmong farms. Despite the increase in number of Hmong growers that have emerged over

the last ten years in the Twin Cities metropolitan region, there has been surprisingly little comprehensive data, of both a qualitative and quantitative nature, collected on the group as a whole.

There is no comprehensive data on the number of Hmong farmers in the Twin City metropolitan region. The Minnesota Department of Agriculture Statistics Division in collaboration with the United States Department of Agriculture collects data, including demographic data, for the Census of Agriculture. The agricultural census collects information on “operator characteristics” for farms including race. However, while there is a category for “Asian operator”, there is no differentiation between countries of origin for this category. Other organizations which have assisted Hmong farmers, including the University of Minnesota Agricultural Safety and Health Program, the University of Minnesota Extension Program and the Minnesota Food Association, have collected limited amounts of data on Hmong farmers but no studies attempt to provide comprehensive statistics.

There are a number of reasons that comprehensive data has not been collected. Data collection, in general, is a time consuming and expensive process and thus, is very challenging. Comprehensive collection of data on Hmong farmers is even more complicated for a variety of reasons. Firstly, many Hmong farmers do not own the land they farm and thus are harder to count. Due to the small-scale nature of many farming operations, they are not even considered to be “farms” or “farmers”. A distrust of government officials, due to the nature of the Hmong immigrant experience, impedes data collection on Hmong growers. Lastly, some Hmong farmers simply do not know to report. Despite these barriers, the information collected by the various organizations aforementioned has proved very valuable. The general lack of data on Hmong farmers and the implications of this absence of data will be discussed at length later in this paper.

Field Work

The key questions of this study are of a descriptive nature. In my effort to undertake a structural analysis, I relied on a qualitative research approach. Fieldwork was used to supplement the absence of comprehensive data on the Hmong farming experience in the Twin Cities². Fieldwork was completed in fall 2006 from September until December³. I used snowball sampling (also referred to as chain sampling) in order to find participants for my study (Hay 2005). I followed the leads given to me by informants by asking everyone with whom I spoke if they knew of anyone with whom I should speak. Originally, participants for the study were found at both the Saint Paul and Minneapolis farmers markets. Using the snowballing method, I followed leads provided to me by my first informants to find other individuals to talk to.

Ten Hmong farmers were informants in my research. All these farmers sell their produce at farmers' markets around the Twin Cities. The only criterion in place for informants taking part in the study was that they must farm and sell their goods for profit. This was how I came in contact with most of them initially. The informants for this study can be broken down categorically as follows:

² Fieldwork methods used in this study were approved by the Social Sciences Institutional Review Board, a subsidiary of the Macalester Institutional Review Board.

³ Follow-up interviews were conducted with select informants in January 2007.

Informant Profiles	
Gender	
Male	4
Female	6
Generation	
1 st generation	6
1.5 generation ⁴	3
2 nd generation	1
Size of Farm	
Under 10 acres	8
Over 10 acres	2
Employment	
Primary Source of Income	1
Secondary Source of Income	9
Farm Land	
Own	2
Rent	8
Time in the US	
<15 years	3
>15 years	7

Table 1: Informant Profiles

My normal approach to asking Hmong farmers to take place in my study was as follows.

First, I gave broad outline of my research, a list of my main questions and an explanation of my methods including my expectations for participants to potential informants for my study.

I made clear that if they chose to participate, their anonymity would be upheld. I used informed verbal consent to begin the fieldwork process with only willing participants (refer to Appendix A).

To provide me with an understanding of organizations working with Hmong farmers, I also used snowball sampling to find key informants who work with or have worked with Hmong farmers. Key informants in this study are persons with knowledge of Hmong growers in the study area but are not themselves in this target group. Since the purpose of this study is to examine the relationship between Hmong farmers and the

⁴ The 1.5 generation refers to immigrants that immigrate to a new country in their early teens.

structures aiding them, key informants were from organizations in the study area with special knowledge of Hmong farming. My approach to finding willing key informants was identical to the process described above for approaching Hmong farmers.

These key informants were Paul Hugunin from the Minnesota Department of Agriculture, Michele Schermann from the University of Minnesota Agricultural Safety and Health Program, Yimeen Vu with the Minnesota Food Association and Jack Gerten, the manager of the Saint Paul Farmers' Market.

Field methods used to further my understanding of Hmong farmers' experiences were participant observation and semi-structured interviews with Hmong growers and key informants. I acted as an overt onlooker during my field observations. An onlooker is a researcher, who during observation, remains an outsider and does not participate in activities. An overt researcher lets participants know that observations are being taken (Patton 1990). The duration of participant observation was limited. Time limitations allowed me to only visit three farms, each for an afternoon. Short amounts of time were spent at various farmers' markets within the Twin Cities for approximately a month.

The interviews conducted with my informants were semi-structured in nature (Hay 2005). A set list of questions was given to each participant to guide the conversation (refer to Appendix B). The interviews were very flexible, allowing the interviewee to discuss what was of the most importance to them. I aimed to keep a rapport, a minimization of discomfort during the interview process, during the interview by allowing informants to guide the conversation in directions with which they felt comfortable (Hay 2005). On average, interviews lasted about an hour long. Informal follow up interviews were conducted over the phone, or by email with informants with whom I needed clarification on certain topics or for whom I had lingering questions.

Data Analysis

All field notes and interviews were transcribed at the end of my time in the field, and I coded all the data gathered. The coding process involved organizing the data to analyze (Jackson 2001). I used abstracting (finding main themes) and content analysis (picking out reoccurring terms, phrases and actions) to organize my data (Hay, 2005). An important part of this process was keeping the identity of my respondents confidential. During the coding process, and throughout the entirety of this paper, letters will code the farmers who participated in this study. Letters A through J will each represent the ten farmers who participated in my study.

A cross case analysis of my data was completed after coding (Patton 1990). This type of analysis allowed me to compare and analyze different perspectives on issues pertaining to Hmong farmers to pull out common themes as well as major discrepancies in my data. Triangulation proved effective for ensuring the consistency of my data (Patton 1990). This method calls for the crosschecking of data in various ways. In this study, triangulation was used to check consistency of my data. Comparing my participant observation data with interview data as well as comparing what different people (with different perspectives) said about the same issues allowed me to verify my data. The triangulation allowed me to validate information as well as to better understand why differences very often existed.

Study Limitations and Potential Biases

Using fieldwork to collect extensive data on Hmong growers was not an easy task. There were many limitations to collection of comprehensive data on Hmong growers. Firstly, and perhaps the most crucial limitation was the language barriers. Most of my

interviews were conducted in English and were generally with family members of the younger generations who speak English. This proved limiting because it was frequently people from older generations who were in charge of farming who did not speak English. As a result, I was not necessarily talking to the person with the most intimate knowledge of the farming operation. For a few interviews, I was able to rely on younger family members to translate for the older family members. This proved very useful in my quest to hear a variety of accounts of the farming experience.

Time limitations also proved to be a limitation in my research. Minnesota, due to the cold climate, has a short growing season. Most of my research was completed in the fall months and thus, a significant portion of the growing season was missed. As a result of time limitations, I was only able to talk to a limited number of individuals. While generalizations can be made and patterns emerge, it must be stressed that every individual's experience as a farmer is unique.

Due to the methods used for this study, biases exist in this research. A general distrust of government officials and academics that are not Hmong exist in the Hmong community due to past experiences (Vu, personal communication). I am a white female student, and as a result, some people were generally suspicious of my motives in questioning them about their farming practices. Initially, this was a barrier when trying to develop contacts. However, once I built trust and developed connections, it became much easier to make more. This is why the snowball method proved very useful for me in my fieldwork. This method, while useful, created certain biases in my research. Due to the nature of the snowball method, my sample of participants is not random. Additionally due to the small number of informants who are mostly in some way connected, this may not be representative of the Hmong farming community as a whole but possibly just of certain

groups of Hmong farmers. Another bias in my methods is that I only interviewed people who were willing to talk to me. Therefore reasons that people opted out of participation in this study were not uncovered. While these biases exist, it is also important to note that these methods give insight about a process common to many individuals.

The analysis of this qualitative data also has the potential for bias. As data were coded, decisions were made about what were general trends that could be validated and what constituted a variation from the norm. In the process, as the researcher, I became the decision-maker in this process. Due to my own background, biases emerged. With that said, conscientious efforts were taken, at all points of the research process, to minimize potential biases.

A Brief History of the Hmong in Asia

Geographic Origins of the Hmong

The Hmong people are an Asian ethnic group. Over the course of time, they have been referred to as “Hmong”, “Mong”, “Miao” and “Meo” in scholarly literature. However, both the names “Miao” and “Meo” are considered to be highly derogatory and no longer used to refer to this ethnic minority group. The Hmong are not a homogenous group. There are generally believed to be five major Hmong groups that developed over time: the White Hmong, the Black Hmong, the Green Hmong, the Striped Hmong and the Red-Headed Hmong (Lo 2001). These groups have different customs and varying dialects.

The origins of the Hmong people are not clear. Through oral history, the Hmong people recollect a history that dates back to the ice age. Many scholars believe that the origins of the Hmong people date back more than 5,000 years. The geographic origins of the Hmong people are contested. While some scholars believe the Hmong came from Iran, others believe the Hmong are from Siberia or southern Russia. The majority of scholars agree that about 5,000 years ago, the Hmong migrated to what is today known as China (Geddes 1976).

In China, the Hmong first settled in the Yellow River valley and subsequently in the Yang-tze River basin region (Geddes 1976). According to scholar Jean Mottin (1980), “The Miao were in China before the Chinese, for it is the latter themselves who indicate the presence of the Miao in the land, which they, the Chinese were gradually infiltrating, and which was to become their country” (17). The life the Hmong led in China can be characterized as peaceful and isolated. The Hmong people did not want to assimilate into Chinese society. For thousands of years, this desire was respected. The Chinese government

left the Hmong people alone under the condition that tributes were paid to the government. The Hmong were left to live a secluded and peaceful lifestyle.

The Migratory Nature of the Hmong People

The isolated lifestyle the Hmong lived in China was disrupted during the Qing Dynasty (1644-1911). Governmental officials and the army oppressed the Hmong. While the Chinese army seized Hmong lands, governmental officials tried to assimilate the Hmong by forcing upon them the adoption of Chinese customs, religious beliefs and political systems. The intense pressure led the Hmong to migrate further into the highlands of China. This migration marked the beginning of a long series of migrations undertaken by the Hmong in order to preserve the integrity of their lifestyle. For the Hmong people migration became a “problem solving strategy” (Fadiman 1997).

The political persecution of the Hmong became more forceful and brought numerous Hmong to leave China to migrate to Southeast Asia. While some Hmong decided to stay in the highlands of China, many chose to migrate. Those who chose the latter option settled in the highlands of Burma, Thailand, Laos and Vietnam. A pull-factor for the Hmong to migrate to Indochina was the relative ease of cross-country migration for the Hmong. They encountered few problems because they were situated in the highlands (Tanaka 2001).

The Mountains and the Hmong

Many similarities exist between the Hmong who settled in different countries. Nonetheless, there are distinct differences between these different groups. This historical review of the Hmong will focus specifically on the Hmong lifestyle in Laos because virtually

all the Hmong refugees who settled in the United States after the Vietnam War came from Laos (Chan 1994).



Map 2: Hmong Homeland in Laos

A popular Hmong proverb states “Fish swim in water; birds fly in air; the Hmong live in the mountains”. As is reflected in this saying, the Hmong lifestyle was heavily influenced by the physical geography of their homelands. In Laos, the different ethnic

groups were stratified by latitude with the Hmong occupying the lands of the highest altitudes. “At the highest altitudes for the people of these regions, between 1,000 and 2,000 meters if it is possible, live the Hmong. Seek among the highest and most inaccessible mountains and there you will find them, for it is there they find themselves at home!” (Mottin 1980, 24).

Most of the Hmong peoples’ history and character results from the fact that they were inhabitants of the highlands (Fadiman 1997). If they had settled in the plains of Laos, their lives would have been dramatically different. As a result of their mountainous location in Laos, the Hmong were able to live the isolated lifestyle they strived to live while in China. Contact between the Hmong people and the dominant cultures in Laos were far and few between. Outsiders hardly ever passed through the rugged mountain territory the Hmong occupied. And the Hmong people hardly ever visited the lowlands of Laos which they referred to as the “land of the leeches” (Fadiman 1997, 120). Consequently, assimilation into mainstream Lao culture, like in China, was avoided.

The Subsistence Lifestyle of the Hmong

The primary reason why the Hmong were able to keep contact with the outside world to a minimum was their ability to live a subsistence lifestyle. The Hmong lifestyle in Laos prior to the Second Indochina can be characterized as self-sufficient in subsistence production. The Hmong lived in small villages of 10-35 families. Most of the families who lived in the village were related in some way. The geographic locations of these villages were dictated by agricultural practices (Vang 1997).

The Hmong were able to subsist off their land. The Hmong produced their own food from the land as well as fodder for their livestock. They made homemade flintrock

rifles and crossbows to hunt a variety of species including birds, monkeys, gibbons, deer, wild pigs and tigers. They gathered fruits, greens, tubers and bamboo shoots. They fished in nearby streams. For many years, the only substantial contact the Hmong had with the outside world was through the Yunnanese traders who brought a small number of goods that the Hmong did not (or could not) produce themselves. These included silver, cloth, thread, shoes and cooking pots (Fadiman 1997).

Farming Systems of the Hmong in Laos

The self-sufficient lifestyle led by the Hmong was possible due to their agricultural practices. In Hmong villages, “life revolved around the crops” (Tanaka 2001, 28). As noted earlier, the geographic location of villages was based on where the most productive farm land was located. The Hmong farmed the land using swidden cultivation, also known as slash and burn agriculture.

“The practice of swidden farming is inextricably intertwined with the migrant identity of the Hmong” (Fadiman 1997, 123). In fact a popular Hmong proverb exclaims “There is always another mountain”. The Hmong would farm the land adjacent to their villages first. When the soil in these fields was depleted, they would farm land within walking distance of the village. Then, once this land became exhausted, overnight shelters were constructed so that the Hmong could farm more distant lands. Once the journey became too long, entire villages would move and the cycle would resume.

Swidden is an old English term which literally means a cleared and burned field. The term swidden is used to describe this type of agriculture because it is considered to be a less judgmental term than slash and burn agriculture. In the past, this agricultural practice was looked down upon as being backwards and environmentally destructive. Swidden agriculture

was blamed for causing severe soil erosion. Key research conducted by Ruthenberg (1980) in the Tropics proved this to be an environmental narrative. “Provided the fallow periods are long enough, a slash and burn system proves to be in no way harmful to the soil...balanced shifting cultivation involves little risk of erosion damage” (Ruthenberg 1980, 48).

Ruthenberg proves swidden, if practiced in a sustainable manner, is not inherently environmentally destructive. Additionally, Ruthenberg found that swidden agriculture can be beneficial to disease control in plants; “An advantage of field shifting is the fact that losses through plant disease remain comparatively slight” (1980, 48). This research helped to dismantle the dominant narrative surrounding swidden agriculture and shed a positive light on this agricultural process.

The swidden process is very labor and time intensive. Though intensive, the swidden method of agriculture requires no plowing, irrigation, terracing or fertilizing (Fadiman 1997). No inorganic inputs were used by the Hmong. Handmade tools, such as axes and brush knives, were used by the Hmong for planting, cultivating and harvesting the *rai* (the crop). The Hmong relied heavily on tradition, favorable weather and most importantly, manual labor for successful yields (Tanaka 2001). The Hmong were dependent on the quality of the land, using proper burning techniques, continuous weeding and benign weather for a good harvest. Hillside rice was the singular most important crop grown by the Hmong. This was because rice was eaten at every meal. Second to rice in importance was corn. Corn was used to feed livestock and also eaten if there was a shortage of rice. A variety of vegetables were also grown by the Hmong. These included squash, spinach, cabbage, cucumbers, pumpkins, yams, ginger, taro, Chinese mustard, peppers, beans, green onion, and sugar cane, among others (Lo 2001).

For the Hmong, preparation for planting began in the dry season (typically in February or March). Everyone in the village, whether young or old, participated in farming in some capacity because it was vital to the survival of the village. Generally, agricultural tasks were gendered (Donnelly 1997). First, the women would clear the underbrush of forested areas. Then, men would cut down trees and larger vegetation. They would ignite the piles of dry vegetation and it is said “the flames rose 400 feet in the air and smoke was visible for miles” (Fadiman 1997, 123). By burning the wood ash, nutrients from the wood ash were released. Once the flames died down, entire families would work to clear the fields of debris, leaving only tree stumps and boulders. The ashes from the burn were spread and the topsoil was enriched by the nutrients released from the burning of wood ash. Once this process was completed, the *rai* could be planted. A variety of crops were grown on each plot of land. This was a way to control pests and disease. Furthermore, the labor intensive nature of clearing land for swidden agriculture forced the Hmong to be conservative in their use of space. Intercropping was a standard practice used to ensure the use of space was as productive as possible (Tanaka 1999).

The cultivation cycle of the crops was fairly standard among the Hmong. In the first and second years of farming a piece of land, rice or corn was the primary crop planted, in addition to a variety of vegetables. In the third year, rice or corn and a variety of vegetables were planted again, or the fields were left fallow, or abandoned completely. By the fourth year, crop yields dropped drastically, due to infertility of the soil. Once this occurred, the plot was left to fallow or abandoned completely, and left to return to forest. Once a field was

left to fallow, a thick grass grew over the fields. This grass was subsequently burned at the end of the dry season as fodder for cattle⁵ (Corlett 1999).

As discussed previously, swidden can be a sustainable practice if fallow periods are long enough and the earth is allowed to rest. Anthropologist Nicholas Tapp (1989) found the long-term fallowing practice as evidence of how un-environmentally destructive Hmong agricultural practices were. Other scholars have come to similar conclusions regarding the sustainability of Hmong agricultural practices (Corlett 1999; Tanaka 2001). The claim Hmong agricultural practices were sustainable in Southeast Asia is disputed. According to some scholars, swidden agricultural practices of the Hmong were very unsustainable and destructive to the land (Fadiman 1997; Kundstadter 1988; Cooper 1984). “In the 1950s, it was estimated that the Hmong of Laos were burning about four hundred square miles of land a year and, by letting the topsoil leach away, causing enough erosion to alter the courses of river” (Fadiman 1997, 123). These scholars cite one primary cause of environmental degradation resulting from Hmong agriculture: opium.

The Hmong began growing opium before migrating to Southeast Asia. Opium poppy was a crop the Hmong arguably grew better than farmers in the lowlands due to geography. It is most effectively grown at higher elevations such as those where the Hmong lived. Opium needs cooler temperatures and alkaline soils, both found at high altitudes, to grow well. It was grown in very small amounts, approximately one or two pounds, per year for personal use. Traditionally, the Hmong used opium as medicine not recreationally.

⁵ Hmong farming practices in Southeast Asia are known because of fieldwork completed by Geddes and Keen in the 1960s in northern Thailand. Similar research could not be completed in Laos due to the war. Scholars emphasize the diversity among Hmong groups from different geographical areas. Nonetheless, scholars agree that the similarities of this to data collected in Laos later allow for connections to be drawn (Corlett 1999).

Opium was primarily used to facilitate ceremonial trances and as a pain reliever for headaches, toothaches and snakebites.

When the French took control of Laos in 1893, they taxed the Hmong. In order to pay these taxes and generate income, the Hmong began to intensify opium production. The Hmong kept about 10% of their opium harvests and began to sell the rest in the lowlands. It was a perfect cash crop for the Hmong because the value per acre is very high. Additionally, its high value to weight ratio made it easy to transport and it did not spoil. Nonetheless, opium was blamed for exacerbating erosion. Unlike fields planted with other crops which reforest over time, opium fields became covered in cogon grass, *imperata cylindrica*, a coarse grass that became difficult to remove and that animals would not graze (Fadiman 1997).

Despite the negative environmental impacts associated with opium, it generated a small amount of wealth for the Hmong. Generally, opium was traded for commodities such as iron, silver and various other goods as opposed to cash. For a long period of time, the opium trade was one of the only connections for the Hmong to lowland Laos. Inevitably, over time, the Hmong became more connected with the outside world and more entangled in world politics.

Life under Colonial Rule

Though isolated in the remote highland region of Laos, the Hmong were not in a political vacuum. The Hmong managed to stay out of politics, for the most part, until the 1940s. Pre-1940, the Hmong had only participated in broader politics when their way of life was threatened. For example, when the French colonized Indochina, including Laos in 1893, they imposed a tax on the Hmong. The Hmong fought against the imposition of this tax in a war now known as the “Madmen’s War”.

In the 1940s, the French built roads in Laos that reached to the highlands of Laos. This transportation network increased the accessibility of the lowlands to the Hmong and isolation decreased. As a result of this increased mobility, new economic involvement of the Hmong in Laos ensued. Along with increased economic involvement came increased political involvement⁶.

Laotian Independence and the "Secret War"

Laos gained its independence from France in 1947. Around this the involvement of the United States in the region increased. Communism was viewed by the U.S. as a threat to all of Southeast Asia, particularly in Laos due to the leanings of Laos' political leaders at the time. The Pathet Lao, one of the two primary political parties at the time was communist and was gaining power rapidly. This was a distress to the United States. Laos' strategic location made it a particular concern to the United States. The American government feared if Laos fell to Communism then Southern Vietnam, Cambodia and Thailand would inevitably follow. In an attempt to prevent this from occurring, the United States began to support and secretly assist the Royal Lao party to increase their political power in Laos.

The United States was one of 14 countries to agree at the Geneva Conference in 1961 that Laos would stay neutral during the war and no troops from any foreign troops or military personnel would be sent into the country. In order to uphold this agreement, though it is arguable whether or not they did, the United States trained a secret guerilla army of Hmong soldiers to support the anti-communist government in Laos and fight against communism. Thus, support from the U.S. in what was commonly referred to as the "Quiet

⁶ This article does not attempt to recount the political and military history of Laos in the post-Colonial era but rather to highlight political events which contributed to the fleeing of many Hmong from Laos to Thai refugee camps and subsequently, to the United States.

War” or “Secret War” in Laos (in contrast to the more public war in Vietnam), came mostly in the form of financial support for the Hmong guerilla forces. Until 1973, the Hmong forces were the primary force in containing the Pathet Lao advance.

The Hmong had their own reasons for supporting the Royal Lao and fighting against the Pathet Lao. This had less to do with supporting the capitalist ideology and more to do with fighting to remain autonomous. The Hmong feared that communist land reforms would threaten the continuation of practicing swidden agriculture (Fadiman 1997, 128).

A series of complex events were set off in 1973 by the agreement made by Kissinger and the North Vietnamese negotiator, Le Duc Tho, to terminate the war in Vietnam. After longstanding political turmoil, the newly declared Lao People’s Democratic Republic replaced Laos’ six hundred year monarchy in 1975. At this time, the newspaper of the Lao People’s Party declared, “the Meo (Hmong) must be exterminated down to the root of the tribe” because the Hmong had been allies of the United States (Fadiman 1997, 138).

Shortly thereafter, over 1,000 Hmong military leaders and high-ranking officials and their families were airlifted to Thailand by American planes. The Hmong left behind were forced to make the difficult decision to remain with the fear of persecution pervading their everyday lives or to flee Laos by foot. Most chose the latter and began the long journey descending from their homes in the highlands into Thailand to find asylum in refugee camps.

Life in the Refugee Camps

There is not a wealth of scholarship about the life of the Hmong in the Thai refugee camps. However, all accounts written paint a picture of severe impoverishment, disease and turmoil. This had a lot to do with the loss of family members, livelihoods, homes and

general freedom. While in the refugee camps, the Hmong found ways to cope with the severe stress they experienced. The coping mechanisms employed by the Hmong were primarily attempts to reclaim their livelihoods and culture. Many of my informants speak of life in the refugee camp as a horrible experience. Yet, they discuss how they did needlework, story cloths, to sell to tourists in the area to generate income and preserve their culture. In order to supplement their inadequate food supply and connect to their past, many people tended to small plots of land in order to grow food. This stemmed from the desire to recreate any semblance of their lives in Laos.

The Hmong Experience in the United States

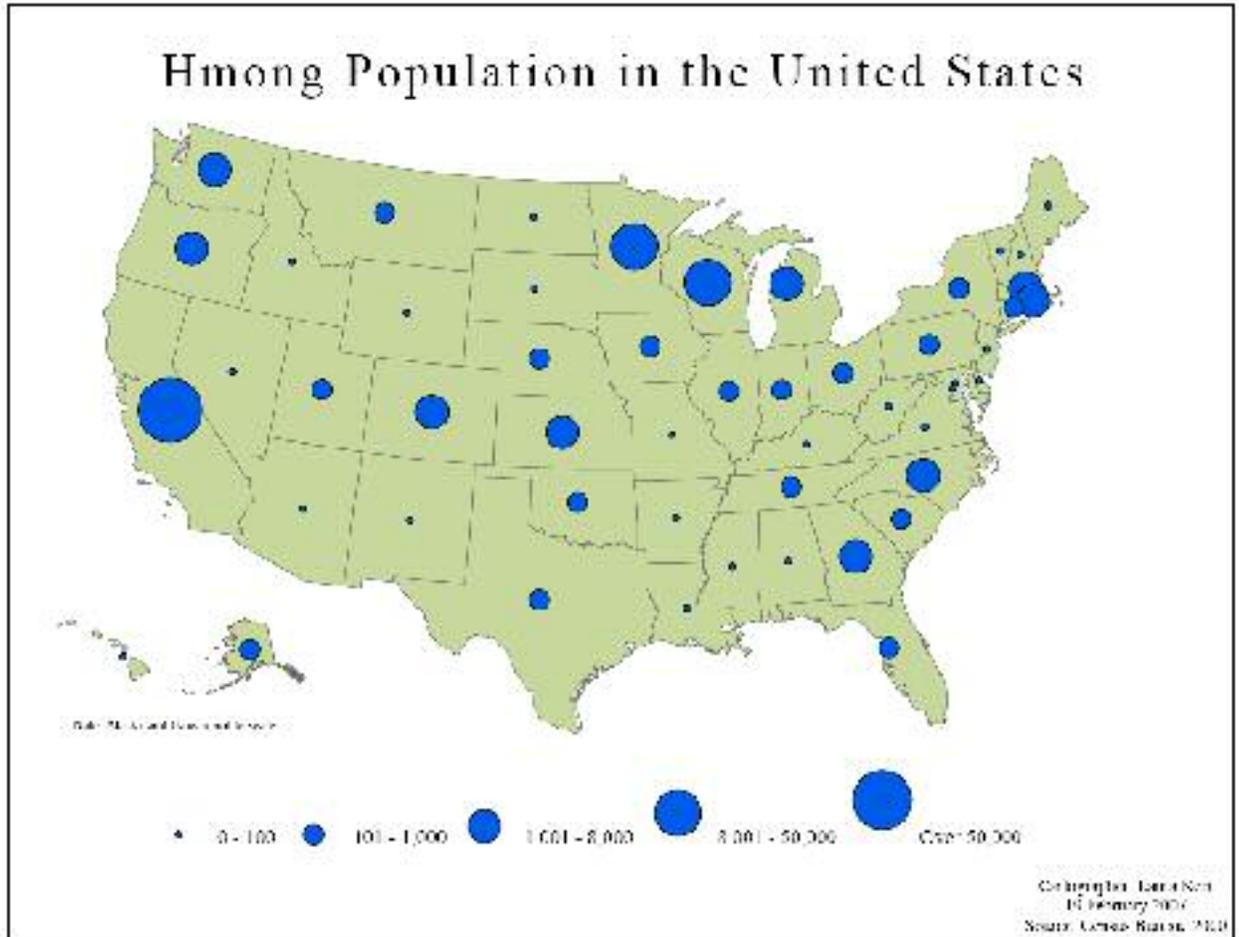
The Thai government refused to provide long-term asylum to Hmong refugees. Many Hmong people were pushed to be repatriated to Laos or resettle in new countries. Most Hmong chose the latter option, following in the footsteps of their military and clan leaders. The Hmong were resettled in France, Australia, Canada and the United States. The largest number of refugees came to the United States. The Hmong were granted entry into the United States under parole. Under the Immigration and Nationality Act of 1965, persons who fled communism were offered “parole” and allowed entry into the U.S. Many Hmong went through a long process to gain entry into the United States as refugees.

In his book *The Promised Land*, Lo characterizes four waves of Hmong migration into the United States (2001). During the first wave (1975-1978) of migration, approximately 9,000 Hmong immigrants entered the U.S. Most of these immigrants were military and clans leaders who were testing out how life would be for those who followed. The second wave of immigration (1979-1982) was the largest of over 80,000 people. The third wave of immigration (1987- 1990) consisted of approximately 31,000 individuals. The final wave of Hmong into the US (1991-1996) was around 27,000 people. By 1996, the U.S. Department of State had discontinued the admission of Hmong refugees into the U.S.

In the refugee camps, many misconceptions about life in America spread like rumors. These included concerns about all facets of life in America. Most pervasive were the worries that their lives would never be the same. And in fact, this was the case in many ways. The Hmong were involuntary migrants. Many Hmong did not want to come to the United States (Lo 2001). When the move proved to be inevitable, the Hmong hoped to be able to move to America and be left alone. Instead, Hmong refugees were placed across the country

to “Spread like a thin layer of butter throughout the country so they would disappear” (Finick in Fadman 1997, 185). This was in order to not force any singular communities to “bear the burden” of having too many refugees within their communities (Lo, 2001). The Hmong were scattered based on where their sponsors, most frequently local church-based refugee relief groups, were geographically located. Newly arrived Hmong refugees were assigned placement in 53 cities in twenty-five different states across the U.S.

As early as 1983, the Hmong began resettling from their initial placement locations to states and cities where support systems, both institutional and familial, existed. The Hmong resettled in areas with job opportunities, strong ESL (English as a second language) programs, educational opportunities and social services. Additionally, the Hmong moved to where their social support structures were present. This included family members and clan leaders that could emotionally support each other through the transitory phase. Furthermore, maintenance of a distinct Hmong identity is very important to the Hmong. By concentrating in distinct geographic locations, the Hmong have been able to maintain their cultural identity (Pheifer 2001). As a result, overtime, three states have emerged as centers of Hmong population. California has the highest Hmong population while Minnesota and Wisconsin, respectively, have the second and third highest populations.



Map 3: The Hmong Population in the United States

Population data for the Hmong community have been taken from the U.S. Census, which in 1990 and 2000 released population data about the Hmong. In 1990, U.S. Census figures indicated a Hmong population of 94,439 in America. In 2000, Census figures estimated a total of 169,428 Hmong in the United States. Scholars have expressed skepticism about the validity of Census data. Most scholars believe that U.S. Census population figures only account for approximately half the Hmong population. The inaccuracy of the Census count is attributed to language barriers, a general distrust of government surveys in the Hmong community and a lack of information about the census (Pheifer 2001). Despite the

presumed underestimate of the Hmong population, the U.S. Census population data does illuminate geographical trends of Hmong settlement patterns.

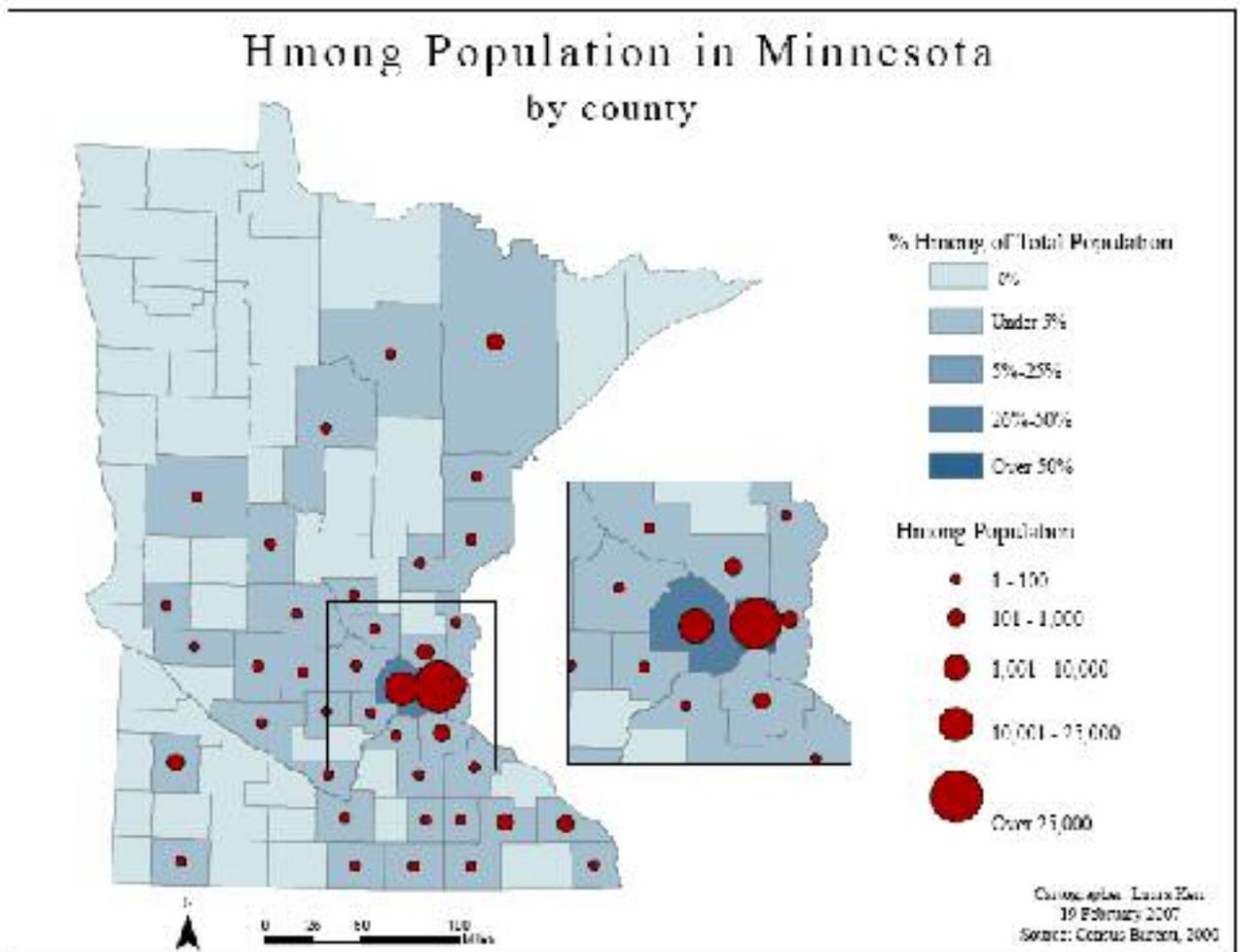
California became home to many Hmong because of its climate and geographic location. In 2000, the U.S. Census counted 65,000 Hmong in California. The major metropolitan centers of population are Fresno, Sacramento and Merced. The temperate climate in California makes it ideal for the Hmong because they are able to farm year round. Additionally, there are many Asian immigrant communities in California. This familiarity has helped make the transition to the United States less foreign. Also, of the utmost importance to the Hmong initially were social services. Prior to 1996, California had one of the more lenient social welfare systems, Aid to Families with Dependent Children, that allowed parents to support their families while they sought out employment and financial stability.

The Hmong faced radical changes in every facet of life when they entered the United States. These included changes in culture, livelihoods, social organization, religious patterns and politics (Chan 1994). In attempts to adapt to life in America, Hmong have had to alter their lifestyles in many ways. Nonetheless, the Hmong have fiercely held onto their cultural heritage while also adapting to life in the United States. By settling in large concentrations, the Hmong have been able to obtain agency over their experience in the United States, despite facing severe hardship. Solidarity has been found in numbers and nowhere is this more apparent than the Twin Cities of Minnesota.

The Hmong in Minnesota

Minnesota was one of the states Hmong refugees were sent to originally from the refugee camps in Thailand. Geographically, there are not many locations more radically different than the homeland of the Hmong, the highlands of Laos. Minnesota is

topographically flat, and characterized by long, freezing winters. The state was chosen as a resettlement site not based on its similarity to the homeland of the Hmong but rather because of established church networks and the strong refugee services that existed in the state- health care, ESL classes, job training and public housing, among other services. These services primarily existed in the Twin Cities of Saint Paul and Minneapolis. Therefore, most individuals were settled in the Twin Cities.



Map 4: The Hmong Population in Minnesota

The Twin Cities are home to the largest urban concentration of Hmong in the United States of over 40,700 individuals. The 2000 U.S. Census estimated that over 97% of the Hmong residents of Minnesota live in the Twin Cities. Since 1990, it is estimated that there has been a 135% increase in the Hmong population within Minnesota, occurring mostly in the Twin Cities metropolitan area (U.S. Census 2000). As discussed previously, many Hmong have migrated to areas with high Hmong concentrations. The Twin Cities were the placement site for many Hmong originally. Many persons situated elsewhere in the United States have gone through secondary migrations to be with their clan members, families and with charismatic military leaders who were placed in the Twin Cities originally.

In recent years, there has been a newly emerging trend of Hmong families relocating to the suburbs of the Twin Cities metropolitan area. These include Bloomington, Brooklyn Center, Brooklyn Park and Maplewood (Lo 2001). The Hmong who are making this move are usually those who have been in the United States for longer periods of time and established themselves financially. This move generally stems from a desire to move out of the city, a life to which the Hmong have not fully adjusted.

In addition to being the home of many Hmong, the Twin Cities have become an institutional, educational and cultural center for the Hmong in the United States. There are over 250 Hmong-owned businesses in the Twin Cities. The largest concentration of these is within the Frogtown, Northend and Eastside areas of Saint Paul. Also in Frogtown is the Hmong Cultural Center, a center "promoting cross-cultural understanding between Hmong and non-Hmong" (Hmong Cultural Center 2006). The Hmong have gained political power within the cities. There are Hmong people who have served or are serving on both the Minneapolis and Saint Paul city councils, the Metropolitan Council and in the Minnesota House of Representatives and the Minnesota State Senate.

Literature Review

This thesis relates to a number of on-going conversations in the literature about immigrant and assimilation as well as cultural and political ecology. Though unique, many parallels can be drawn between the Hmong refugee experience and many other immigrant and refugee groups' experiences in the United States. To fully understand the Hmong farming experience in the Twin Cities metropolitan region, it must be situated in a broader conversation concerning the adaptation of refugees, and more broadly, immigrants in the United States. A brief overview of assimilation theory provides this necessary context. Furthermore, an examination of the literature on Hmong assimilation in the United States provides a framework to better understand the experiences of Hmong farmers in Minnesota. Additionally, this paper draws from the fields of cultural and political ecology to provide an in-depth analysis of Hmong growers. Both these fields provide a lens to more deeply understand human-environment interactions. An overview of the key theories of both cultural and political ecology situates the Hmong farming experience in Minnesota.

Assimilation Theory

Adjusting to life in a new country is inevitably a colossal challenge whether arriving as a legal immigrant, illegal immigrant or a refugee. This process of assimilation has long been of interest to scholars from a variety of fields in the social sciences. Different theoretical frameworks and models of assimilation have emerged as scholars continually analyze and re-analyze immigrants' and refugees' experiences in the United States.

The United States, frequently described as a country of immigrants, is a country that has grappled with the idea of how its new citizens should act since its founding.

Fundamental in the concept of new citizenry was the expectation that new citizens would shed their own identities and become American by adopting American values. The influx of immigrants that occurred in the late 1800s brought about a necessity to place these ideas into regulations. Procedures formalizing the “Americanization” process emerged in the late 1800s in acts such as the Naturalization Law of 1870 (Nagel and Staeheli 2005).

Since this time, the approach to the adaptation of immigrants and refugees in the United States falls into the category of assimilation.

The concept of assimilation emerged out of the idea that to successfully integrate into America society, immigrants should undergo a process by which they shed their own culture and become Americanized. Broadly, assimilation meant “encouraging immigrants to learn the national language and take on the social and cultural practices of the receiving community” (Castles and Davidson 2000, 60).

In the 1960s, Milton Gordon created a comprehensive assimilation theory. According to Gordon, there are seven subprocesses of assimilation. Cultural assimilation is usually the first to occur followed by structural, marital, identificational, attitude receptional, behavior receptional and civic assimilation (Gordon 1964, 76). These subprocesses may occur simultaneously or “may take place in varying degrees” (Gordon 1964, 71). Of course, compartmentalizing assimilation into these categories implies they are separate when in fact, these subprocesses are frequently interrelated.

In addition to the subprocesses of assimilation, Gordon presented three theoretical outcomes of assimilation that would occur over time, across multiple generations: Anglo-conformity, the “melting pot” and cultural pluralism. Implied in the traditional conceptualization of the assimilation process, presented by Gordon, was a loss of one’s culture and adoption of a new culture. This is implicit in two of the theoretical outcomes of

assimilation presented by Gordon, Anglo-conformity and the “melting pot”. The concept of Anglo-conformity suggests that the outcome of assimilation into American culture will be for the newcomers to adopt the culture of the Anglo-Saxon group and renounce their own culture. The “melting pot” theory implies that there will be a biological and cultural merger of immigrants and other Americans creating a unique American culture (Gordon 1964). Historically, these two concepts proved useful to describe the immigrant experience assimilating to life in the United States.

In the context of present-day United States, scholars have denounced the idea of Anglo-conformity and the “melting pot” as inaccurate descriptors of the immigrant experience (Stienber 1981; Fairchild 1926; Strand & Woodrow 1985). These ideas are not a fitting conceptualization of the process of assimilation into American society due to the pluralistic nature of American society. A more accurate conceptualized outcome of assimilation is cultural pluralism. Cultural pluralism, also articulated by Gordon and adopted by many other scholars (Lo 1997, Stand and Woodward 1985, Hein 2006) implies the preservation of many parts of one’s culture while also developing common goals and interests with the host society over time (Gordon 1964). Cultural pluralism “postulates the preservation of the communal life and significant portions of the culture of the later immigrant group within the context of American citizenship and political and economic integration into American society” (Lo 1997, 5). The concept of cultural pluralism is a fairly accurate descriptor of the assimilation process of refugees. Refugees frequently come from fairly different cultures; this makes the likelihood and practicality of assimilation as suggested by the “melting pot” or Anglo-conformity less realistic and furthermore, very problematic. Cultural pluralism is the most fitting conceptualized outcome of the assimilation process (Lo 1997; Strand and Woodward 1985). No matter what the theoretical outcome of the

assimilation process, Anglo-conformity, the “melting pot” or cultural pluralism, explicit in all three different outcomes of traditional assimilation theory is the belief that over time, immigrants become more “mainstream” and lose their distinctiveness (Nagel 2002).

Segmented Assimilation Theory

Traditional assimilation theory, presented by Gordon, and employed by other scholars, continues to receive much criticism. Assimilation theory has been additionally critiqued by scholars for deemphasizing the cultural differences between immigrant groups (Portes and Rumbaut 2001; Portes and Zhou 1993; Zhou 1997; Hein 2006). This critique of assimilation theory led some scholars to reconceptualize assimilation. Out of this emerged the theory of segmented assimilation (Portes and Rumbaut 2001; Portes and Zhou 1993; Zhou 1997). Segmented assimilation theory emphasizes the differences in the assimilation patterns of different immigrant and refugee groups. Instead of there being a singular, linear path to assimilation, segmented assimilation theory posits that there are numerous paths and that immigrants become integrated into society in a variety of ways. Segmented assimilation also stresses that assimilation is a two-way process; it is what migrants do as individuals and what society does to incorporate those individuals.

Measuring Assimilation

To this day, despite numerous critiques, assimilation theory is still dominant in the conceptualization of the adjustment of immigrants (Brubaker 2001). This is apparent in the conclusions of Alba & Nee (2003) in their assessment of contemporary immigration, “Assimilation remains a pattern of major import for immigrant groups entering the United States” (270). Governmental policies in the United States concerning immigrants are still

driven by the fundamental goal of assimilation. Nonetheless, development of criteria to measure how well assimilated a group is very difficult to develop. In fact, an objective set of criterion measuring the degree of assimilation does not exist. Therefore, subjective measures are of the utmost importance in determining levels of assimilation (Strand and Woodrow 1985).

Measures of assimilation generally fall into two disparate categories. These disparate measurements result from the debate that exists among scholars and policy makers about assimilation and its meaning. While some scholars are more concerned with economic measures of assimilation, others are more focused on the cultural measures of assimilation.

Economic measures are most frequently used to determine how immigrants are adapting to life in the United States. This is due primarily to the fact that the main concern of the government in assisting immigrants is financial independence. This is particularly important to the state in the case of refugees. When refugees arrive in the United States, they are dependent upon public assistance. From the government's viewpoint, the sooner refugees are able to assimilate economically, the sooner they are financially independent and no longer relying on public assistance. Therefore, economic indicators are seen as most important in measuring assimilation. These measures include, but are not limited to income, homeownership, reliance on public support, employability and language skills (for example, Clark 2003).

Other scholars assess adaptation of immigrants by employing cultural measures of assimilation. These cultural measures of assimilation are aimed at measuring the extent to which immigrants identify as American. Measures of cultural assimilation include, but are not limited to cultural practices, intermarriage, social mobility, language skills, religious beliefs as well as a sense of citizenship in host country (for example, Huntington 2002). Also

principal in the measure of cultural assimilation is assessing the spatial patterns of immigrants. Scholars determine whether or not a particular group is segregated or dispersed within a particular area (for example, Miyares 1997). Implicit in the cultural measures of assimilation is the idea that, to assimilate, an immigrant group must become “more like us”. In many ways, this belief borders on the idea of cultural superiority and racism. Addressing these concerns, scholars employing cultural measures of assimilation have made clear that immigrants can assimilate by “using their rights as citizens to promote group difference, such as in cases involving religious dress and practices” (Nagel and Staeheli 2005, 488).

By employing disparate measures of assimilation, either cultural or economic, too frequently scholars limit themselves to either academic discussion. Assimilation is a complex process in which both these measures prove useful for shedding new light on how particular groups are assimilating into a particular country. These academic discussions should not be mutually exclusive. Rather, employing both cultural and economic measures of assimilation can provide a more holistic picture of how a particular group is adapting to life in the United States.

Measuring assimilation leads scholars to assess whether or not assimilation has been successful. Too frequently scholars and policy-makers construct assimilation as an “all-or-nothing condition”. They view immigrants as assimilated or not assimilated. “Yet immigrants and other marginalized groups often move between sameness and difference in ways that challenge those constructions” (Nagel and Staeheli 2005, 489). This conclusion made by Nagel and Staeheli in their study proves very useful in the context of Hmong immigrants assimilation patterns.

Studies of Hmong Assimilation

Much of the literature on the Hmong in the United States has been an assessment of the success of the Hmong in assimilating to life in the United States. The lives of the Hmong could not have been more radically different in Laos and in the United States thus, they have received much scholarly attention. When they became refugees in the United States, their skills were not easily adaptable. The Hmong went from being small-scale farmers from the highlands of South East Asia to being expected to adapt to life in urban areas of the United States with hardly any preparation. This lack of preparation has made the adjustment to life in the United States very challenging for the Hmong. A majority of the studies completed on the assimilation of the Hmong fall into a few general categories including education, physical and psychological health and economic status. General conclusions concerning the success the Hmong have had adapting to life in the United States are hard to make because of the cacophony of research on the topic. In her book *Hmong Means Free*, Chan expresses this sentiment.

Given the fact that researchers who have studied the Hmong have asked disparate questions, used different methodologies, interpreted their empirical finding according to theories in several disciplines, and obtained information from varying informants, it is difficult to synthesize the available information in any systematic way.

(Chan 1994, 50)

Despite the distinct differences in scholarship on the Hmong, a general conclusion most scholars have come to is that the Hmong have had particular difficulty adapting to life in the United States (for example, Lo 1997; Chan 1994; Hein 2006; Fadiman 1997).

Cultural Ecology

Cultural ecology emerged out of the human-environment traditions of both anthropology and geography in the mid 1900s. Geographer Carl Sauer heavily influenced the field of cultural ecology with his works on the human impact on landscape transformation. Also of great importance to the development of was the anthropologist Julian Steward who wrote about the importance of adaptation to the understanding of human-environment interactions. Steward's work directly influenced the first cultural ecologists and their work, which employed the adaptation approach to analyzing human culture.

Broadly, cultural ecology is an approach used to study human-environment interactions. The *Dictionary of Human Geography* defines the approach as “a study of the adaptive processes by which human societies and cultures adjust through subsistence patterns to specific parameters of their local habitat” (Watts 2000, 134). Central to cultural ecology was the way in which subsistence societies cultures worked as adaptive mechanisms for the surrounding physical environment. A good example of classic cultural ecology is anthropologist Roy Rappaport's work in New Guinea describing the importance of rituals as adaptive processes (Rappaport 1969).

Out of this adaptation research emerged scholarship that was primarily concerned with cybernetics (also referred to as energetics). Tracing energy flows through systems allowed scholars to further understand how many different types of systems, including agricultural systems, remain in balance. By employing cybernetics, cultural ecologists came to new conclusions about traditional systems of agriculture. In a time when modernization was heralded in agriculture (particularly the Green Revolution), the dominant narrative regarding traditional agricultural systems was they were “backwards”, “primitive” and environmentally

destructive. Cultural ecologists showed these systems as being appropriate, efficient, environmentally friendly and productive (Robbins 2004, 33).

By showing traditional systems of agriculture as appropriate, cultural ecologists affirmed the importance of local, indigenous knowledge. Research affirmed the importance of the intimate knowledge local people have of their environment and illuminated how local practices, including agricultural practices, were manifestations of this knowledge (Netting 1986, 1993). While cultural ecology has fallen under criticism, this research on traditional knowledge systems has continued to receive attention and hold importance.

One such agricultural system studied by cultural ecologists was slash and burn (or swidden) agriculture, the agricultural system employed by the Hmong in Southeast Asia. The dominant belief regarding slash and burn agriculture was that it was extremely environmentally destructive. Slash and burn agriculture was attributed for causing immense soil erosion. Cultural ecologists challenged this dominant narrative. Numerous cultural ecology studies found slash and burn agriculture to be an effective form of agriculture (Conklin 1954; Geertz 1963; Dove 1983). In his book, *Migrants of the Mountains: The Cultural Ecology of the Blue Miao of Thailand*, W.R. Geddes employs a classical cultural ecology approach to study a Hmong village in the highlands of Thailand in the 1960s. Due to their isolation in the mountains and subsistence lifestyle, the Hmong in Southeast Asia were ideal subjects for cultural ecologists. Geddes uses a classical cultural ecology approach to display how Hmong agricultural techniques (slash and burn agriculture) influenced their migratory patterns. “Their answer to exhaustion of resources has been to move onwards...a push and pull factor taking them in all directions over the mountains of Indo-China” (Geddes 1976, 251). Due to the abundance of land at their disposal in the highland, Geddes shows that the

Hmong were able to move around to support the use of a slash and burn agricultural system and thus were able to be environmentally sustainable.

In his study of the Hmong, Geddes use of the cultural ecology approach has limitations. At the time of his study, the Hmong had become very involved in the trading of opium with people from the lowlands. In order to meet demands, the Hmong began more intensely cultivating opium poppy that threw off the equilibrium of the Hmong agricultural system. Hmong involvement in a larger economy changed their subsistence lifestyle. Yet, this fell outside the scope of the cultural ecological lens employed by Geddes. This example illuminates the limitations of cultural ecology and contextualizes the criticisms cultural ecology began to face.

Cultural ecology began to fall under intense scrutiny because it treats people and their environments as closed systems. This has been frequently criticized as too myopic an approach. Critics argued that even the most remote, isolated communities were involved in the global circulation of goods and labor (Watts 1983). This is perfectly illustrated by the Hmong in Southeast Asia and their involvement in the opium trade. However, critics claimed that cultural ecologists tried to ignore these connections and study groups within a vacuum. Larger political, economic and structural processes became impossible to ignore in the developing world communities in which cultural ecologists studied. As the necessity of an approach that better addressed these forces became apparent, and political ecology emerged.

Political Ecology

Political Ecology was heavily influenced by the scholarship of cultural ecology as well as influences from social theory. The basis of the political ecology approach was that the world is united under a global capitalist system that connects many different actors and that human-environment interactions must be understood within this context. By incorporating social theory, cultural ecology and this embrace of the global economy, political ecology provides a lens for rich analysis of environmental problems.

The Emergence of Political Ecology

Scholars have reviewed the origins of political ecology extensively over the years (for example, Bryant and Bailey 1997; Robbins 2004). Generally, these reviews describe early political ecology scholarship as combining of social and ecological methods to understand environmental degradation. In *Land Degradation and Society*, Blakie and Brookfield, widely accepted as first scholars who attempted to develop a methodology and basis of theory for political ecology, define political ecology as combining “the concerns of ecology and a broadly defined political economy” (1987, 23). Blakie and Brookfield were among a number of scholars of early political ecology who used this approach to analyze environmental problems, such as land degradation, soil erosion and deforestation. The study of these environmental problems was limited to the Third World.

Out of this early scholarship, three key elements of political ecology emerged: marginalization, chain of explanation and a “broadly defined” political economy (Robbins 2004). Marginalization combines the concepts of margins from economics, ecology and political economy. Political ecologists argue that these processes (social, political and environmental marginalization) are inextricably linked. One type of marginalization leads to

another and vice versa. For example, Blakie and Brookfield when examining land degradation conclude “land degradation is both a result of *and* a cause of social marginalization” (1987, 23).

Chains of explanation, the second principal theme of early political ecology, stresses the importance of scale in the examination of environmental systems. Scale, whether temporal or spatial, is of the utmost importance in examination of human-environment interactions. By first examining the individual or group directly in contact with the land under examination and then tracing the social relations outward from a local to a regional, national or global scale, a chain (or web, some argue) of explanation emerges in which individuals’ relationship with the land emerges as part of a complex system of decisions and relationships. Frequently, these chains transcend time and become rooted in history. In fact, “ultimate causation may lie with historic events and decisions” (Neumann 2005, 35).

The last theme of early political ecology, as identified by Robbins, is a “broadly defined” political economy. Political ecology recognizes the importance of connecting humans’ decisions regarding their environment to the broader political economy. Decision processes will be different based on the dynamic nature of the political economy. “Changing political and economic conditions therefore alter the context of decision- makers and set the terms for the use of the environment”. Emblematic of this concept is agricultural systems. Farmers’ decisions about what crops to grow on their land are heavily based on both the economic and political conditions at the time of planting. The key element of the political economy as well as marginalization and chains of explanation have remained very important within political ecology research and furthermore, new themes have emerged as having significance.

The Broadening Scope of Political Ecology

The more recent works of political ecology demonstrate how the scope of the field has significantly broadened since its inception. While the core concepts still are very valuable in scholarship, other major themes have emerged. While it is outside the scope of body of work to discuss all these themes, the three most important in the context of this study are discussed: agency, social constructions of knowledge and state-civil society relations.

The concept of agency is fairly new in political ecology. Cultural ecology and early political ecology both “tended to think in terms of structures, systems, and interlocking variables and had little to say about actors and their agency” (Biersack and Greenberg 2006, 5). In the field of political ecology, there has been contention over the relative importance and explanatory nature of human agency and systems or rather, structures. Over time, political ecologists have begun to incorporate practice theory into their work (Bourdieu 1977; Ortner 1984). This theory “attends to the constraints of structure but also to the indeterminacies of agency and events” (Biersack and Greenberg 2006, 5). The concept of agency stresses the importance of understanding humans as “agents” who are proactive and able to adapt. The concept of humans as “agents” is of the utmost importance in the work of cultural and political ecologists who study systems of agriculture (Richards 1985; Netting 1993). The notion of “agency” was important to these scholars in their quest to demonstrate the adaptability and success of small-scale farmers.

The concept of knowledge as a social construction has emerged mainly as a result of the questioning of Western scientific and environmental knowledge. Heavily drawn from cultural ecology is the idea that indigenous knowledge systems are not “backwards” but in fact are based on an intimate knowledge of the environment. Political ecologists extend the study of “indigenous” knowledge systems to “social” knowledge systems versus official,

state of scientific knowledge systems (Robbins 2004, 83). In his book, *Political Ecology, Mountain Agriculture and Knowledge*, Jansen examines the implications of socially constructed knowledge systems. He demonstrates that the lack of scientific knowledge of local peasants in El Zapote, Honduras is not the root cause of environmental degradation. Moreover, he rejects the dichotomy of local knowledge versus scientific knowledge. Instead, he presents the concept of “knowledge configurations” which are “multi-layer forms of knowledge which interweave, hybridize and creolized continuously” (Jansen 1998, 192). This concept of “knowledge configurations” provides a useful explanation of agricultural knowledge systems.

Political ecology examines the implications of these constructed knowledge systems with respect to environmental policy, and in the case of this paper, agricultural policy. There has been a call for a “critical evaluation of institutions, policies and management practices” (Neumann 2005, 76). While there has been an increasing amount of attention paid to the relationship between the state and civil society, most of this research has examined the efficacy (and shortcomings) of environmental movements (Peet and Watts, 1993). However, the extension of this analysis to agricultural policies has been made (Adas 1981; Scot 1985). Focusing on agriculture in the Third World, scholars have studied the cash-cropping system and its effect on livelihoods as well as its environmental impacts (Muldavin 1997; Clapp 1998; Zimmerer 1991). Additionally, the environmental and livelihood impacts of the Green Revolution agricultural practices (characterized by high inputs of fertilizers, monocropping and machinery) in the Third World have been the focus of many political ecologists (Shiva 1991; Adams 2001; Perkins 1997). While, political ecology scholarships on agricultural systems in the Third World are abundant, there is a lack of political ecology research on agricultural systems in the first world. This can be attributed to the novelty of applying the political ecology lens to the First World in general.

First World Political Ecology

The realm of political ecology scholarship was, for a period of time, limited to the Third World context. Increasingly, however, political ecologists have begun to apply the tools of the discipline in a First World context. One of the first scholars to bring political ecology research “back home” was James McCarthy. In his article “First World Political Ecology: Lessons from the Wise Use Movement”, McCarthy argued that there was no empirical evidence that justified the withholding of political ecology from a first world context (McCarthy 2002).

In their article “Political Ecology in North America: Discovering the Third World within?”, Schroeder et al. present two ways of conceptualizing how political ecology can be used within the First World context. One approach demonstrates that Third World conditions exist within a First World context and that the same structural forces that created “peripheries, backwaters, wastelands, remote areas etc.” in Third World countries have done so in the First World (2006, 165). A second approach to First World political ecology, which proves very informative to this study, relies on the rejection of the First/ Third World dualism as a construction and looks to move beyond that binary. This approach “ ‘re-reads’ the First World for heterogeneity and diversity, asserting that spaces we have always assumed to be purely capitalist always carry within them elements that we now commonly associate with the Third World” (Schroeder et al. 2006, 165).

One key factor challenging the First World and Third World binary is the influx of immigrants into the United States. Migrants from across the world, including Southeast Asia, “have brought sizable Third World populations into the spatial heart of capitalism” which have “brought with them cultural and economic practices that lend themselves immediately to political ecological analysis” (Schroeder et al. 2006, 164). This study is a response to this

call for further critical political ecological analysis of immigrant populations in the United States.

Scholarship on how livelihood systems are affected by migration, particularly as forced migration, is lacking from the field of political ecology. Yet, the theories of political ecology offer a unique lens to study this issue. The study of Hmong growers in the Twin Cities metropolitan area provides an opportunity to study how a group of people has tried to recreate their livelihood system in their new country. In this case, due to forced migration, the Hmong have adapted their agricultural livelihood from the isolated highlands of Laos to a bustling metropolitan region in the United States. Many institutions have been involved in the process of assisting Hmong growers. This intersection of groups provides a unique case to study two different knowledge systems that have come in direct contact. While the relationship between traditional and scientific knowledge systems has been analyzed in a Third World context, little research has examined how migration has challenged and changed traditional systems of knowledge. By understanding the broader conversations of assimilation theory in respect to migration and employing political ecology, the experience of Hmong growers in the Twin City metropolitan region can be better understood.

I. The Decision to Farm

What factors have influenced Hmong growers' decision to farm? Many Hmong people, all of whom reside within the cities of Saint Paul and Minneapolis, are farming as a source of livelihood. In order to understand the existence of so many Hmong farmers in this area, the motivations behind farming must be examined. This examination of why Hmong farmers have made the decision to farm is broken into two parts: Findings and Analysis. In the Findings, the results of fieldwork are discussed. All the informants of this study had numerous reasons they have decided to farm. The varying motivations behind this decision are discussed within this section. In the Analysis section of this chapter, I examine the underlying theme of the variety of reasons for farming. Additionally, I look critically at the institutional support provided for the Hmong in making this decision by assessing whether or not organizations within the Twin Cities have been supportive of the decision to farm.

Findings

Hmong have been growing produce since they arrived in the United States in the 1970s. Originally, Hmong used existing spaces, typically for flower gardens, to grow a variety of vegetables and herbs. This enabled families to have fresh produce without having to spend a lot of money. People were also able to plant certain vegetables that are typical in a traditional Hmong diet that cannot be found in American grocery stores. One farmer explained how she farmed in Laos, as well as in the refugee camp in Thailand. When she came here, she found "a tiny square of dirt" in the parking lot outside her apartment complex and used it as a garden (Farmer D, personal communication). All the farmers in this

study grew produce in gardens for personal consumption before beginning to farm for profit.

Hmong have been farming for profit since the early 1980s. Jack Gerten, manager of the Saint Paul Farmer’s market, remembers Hmong being members of the market since the early 1980s (personal communication). The decision to farm for profit is a very important decision for Hmong growers, while simultaneously seeming like a natural choice. When posing the question, “Why did you decide to farm?” I received a range of answers that can be separated into three general categories: cultural reasons, social reasons and economic reasons.⁷

Cultural Reasons	Social Reasons	Economic Reasons
<ul style="list-style-type: none"> • Love of farming & land • Link to past • Teach children about their culture • Able to grow and eat familiar foods • Empowering • Therapeutic 	<ul style="list-style-type: none"> • Family cohesiveness • Keep children out of trouble • Socialization between families 	<ul style="list-style-type: none"> • Desire to be self-sufficient • Source of Income: primary or secondary • Supplement income • Existing skill- no other training needed • Supplement food supply

Table 2: *Motivations for Farming*

Cultural Reasons to Farm

The most frequent answer for why the informants in this study chose to farm was “I have always farmed”. As previously discussed, farming was a central part of life for the Hmong in Laos. The Hmong, as slash and burn agriculturalists, have an agrarian history. All members of the family participated in some aspect of farming. “My earliest memories are of being in the fields” (Farmer J, personal communication). Farming provides a link to the past

⁷ In the article “Use of the North American Guidelines for Children’s Agricultural Tasks with Hmong Farm Families”, Schermann et al. also use these categorizations to organize Hmong farmers reasons for farming (Schermann et al 2003).

for the Hmong who have chosen to continue to do it. As one farmer so aptly puts it, “It is a tie to our culture. A tie to something we know” (Farmer B, personal communication). The importance of this link to the past cannot be underestimated.

The Hmong have undergone very complex changes as refugees fleeing from Laos. The Hmong are characterized as forced refugees because they were forced to move due to a fear of repression or retaliation. For voluntary refugees, who are usually fleeing political instability, the movement becomes the beginning of a new life. On the other hand, forced refugees are unexpectedly forced to uproot their lives and as a result, are usually past oriented and have extreme difficulty adapting to a new culture (Strand & Woodrow 1985; Kunz 1973; Hansen & Oliver-Smith 1982). The practice of farming has been an activity that ties the Hmong to their past while also fulfilling their present needs. In this sense, the act of farming has been “therapeutic”, as described by one informant (Farmer C, personal communication).

Another important culturally significant factor in the decision to farm was the desire to grow culturally important foods that are not in grocery stores. Particular produce, not on American grocery store shelves, can be grown for personal consumption as well as distributed to family and friends. One farmer expressed the importance of growing “traditionally Hmong vegetables” to sell at the market in order to increase non-Hmong persons’ understanding of the Hmong people (Farmer F, personal communication).

Social Reasons for Farming

A significant factor in the decision to farm was the desire to keep social networks, immediate and extended, intact. In Laos, all community members participated, in varying capacities, in farming. In Minnesota, this is also the case. None of the informants in this study employ any labor. They all rely on family labor. Everyone who is part of the extended

family helps on the farm. Many of the informants expressed a desire to keep family cohesiveness intact and explained that farming made this possible. All the farmers said that, when out of school, their children come and help on the farm. This provides parents an opportunity to teach their children about their roots. It also serves as a “prevention program that keeps the kids out of trouble” (Farmer F, personal communication). One farmer expressed that he worries that his children will be tempted to join gangs. He explained his decision to farm was heavily influenced by his desire to teach his children about their culture, hard work and keep them away from harm (Farmer G, personal communication).

Social structures that influenced the decision to farm extend beyond immediate family. Three of the farmers explained that they wanted to farm because it created a workplace in which they could socialize with other Hmong people. Depending on the location of one’s fields, there are opportunities to socialize with other families while farming. Also, markets provide a great place to be able to socialize with one another during downtime. “Community is very important to the Hmong. Farming allows us to keep the community together” (Farmer D, personal communication). Unlike Americans, who are generally focused on the individual, the Hmong have a very strong communal identity (Nyman 1999). Farming provides a way for these farmers to preserve that community.

Economic Reasons for Farming

The vast majority of Hmong farmers in Minnesota farm to supplement their primary income (Vu, personal communication). This was the case for nine of the ten farmers with whom I spoke. Generally, one member of the household, typically the male, holds another full time job. These jobs are primarily in the manufacturing and service industries,

respectively. The other member of the household, typically the female, concentrates on the family's farming operation.

Farming allows families to add to their net income in two ways: by supplementing their food supply and by supplementing their income. During the growing season, farming replenishes the food supply with fresh and familiar produce. This allows Hmong farmers to save money on groceries from week to week. Farming also provides a monetary supplement to one's primary income. This can go towards a variety of necessities. The primary reason mentioned by farmers as to why a secondary source of income was necessary was to help fund their children's education. "My parents wanted to send all their children to the best schools they could so we could have lots of opportunities. Farming helped them do that" (Farmer D, personal communication).

Farming is a practical secondary source of income for these families because it is a skill they already possess. As aforementioned, most Hmong have farmed their entire lives. "It is something they already know. It is something they can do even if their English is not good. They do not have to go back to school and get another degree" (Schermann, personal communication). The vast majority of Hmong arrived in the United States, with no knowledge of the English language (Fadiman 1997). Additionally, when the Hmong arrived in the United States, many also had never been formally educated (Chan 1994). Despite the lack of English language skills and formal education, Hmong who chose to farm could still make a living. Farming is a source of income that does not require one to speak English, though language barriers have proven to be inhibiting for Hmong farmers. Nor does it require formal education.

The practice of farming has proved particularly important for older generations of Hmong refugees. "It is almost impossible to get some other kind of job. Many do not speak

or write English. Can you imagine, for some of our older women, the harassment in the work place? It is very serious” (Thao 1997). Hmong from older generations might be considered unemployable due to a combination of factors including age, lack of formal education, training and inability to speak English. Their knowledge of farming systems and ability to work on the farm can be invaluable. Farming is a way in which family members of older generations can contribute to the economic well-being of the family.

On top of being practical, farming is a good secondary source of income for the farmers I interviewed because they love to do it. “Often times you find a lot of new refugees working in warehouses, doing manual labor they don’t enjoy...when farming they can make money and be economically stable doing something they love” (Vu, personal communication). And unlike manual labor or warehouse jobs, in the fields one can be their own boss. “No one tells me what to do. I make my decisions. I make my hours” (Farmer I, personal communication).

Analysis

The Hmong have chosen to farm for a variety of reasons. A predominant underlying theme in these decisions is the desire to have agency in one's life. Humans are not powerless victims of circumstance but rather proactive, adaptive individuals. By seeing humans as "agents", their decisions are better understood. Agency plays an important role in Hmong farmers' decision to farm. I argue that farming has allowed the people with whom I spoke to have control over their lives both economically and socially. Agency is highly valued due to the lack of control many Hmong felt in the years following the end of the Secret War in Laos. Below, I will demonstrate how organizations in the Twin Cities recognized the importance of farming to the Hmong and thus, were very supportive of the decision to farm. I will also contend that the widespread support of the decision to farm as a means of assimilation existed because there was an acknowledgement of the Hmong as a unique group of refugees whom had extreme difficulties adapting to life in the United States.

The Importance of Agency in the Decision to Farm

Agency is a predominate theme which underlies most of the reasons Hmong farmers decide to farm. Reflected in all the responses to the question "Why do you farm", was a desire to have control over one's life, both economically and socially. Economic agency is achieved through farming because farming allows one to be their own boss, make their own hours, and have control over decisions regarding the farm. Informants who were employed in other jobs and farm as a supplementary source of income expressed how farming was a welcome escape from their other jobs. One farmer described his day job as the time in which he was bossed around. "Farming is a relief after this. I go into my fields and do my work"

(Farmer F, personal communication). Farming was described as “empowering work” (Vu, personal communication). Hmong farmers are able to use skills that they already have and communicate in a language they know when they are in the fields. Farming is both “relieving” and “empowering” because it allows these growers to be in control over their economic well-being.

The decision to farm is also important to farmers because it allows them to have control over their social structures, most importantly, their families. When farming, all informants said they bring their entire families to the farm. The time at the farm is a time when parents do not have to worry about the whereabouts of their children. They are able to teach their children about an important part of their culture. Most importantly, it is a place where parents can exercise authority over their children. Many of the informants expressed the desire for their children to see them as role models. However, in day-to-day life, informants expressed a sense of powerlessness because of their inability to speak English. Children are frequently placed in the position of being translators for their parents. This can create a sense of powerlessness among parents, as their traditional parental role is challenged. When farming, however, parents are the authority figures that are in control. They become the role models for their children teaching them about the practice of farming as well as their culture.

A Loss of Agency in Context: The Refugee Experience

When placed in a historical context, the importance of this desire for agency, which is so influential in Hmong farmers’ decision to farm, becomes explicable. The Hmong are a group who “place a high value on independence and self-sufficiency” (Stand and Jones 1985, 135). As refugees in the United States, the Hmong have frequently felt powerless. When the

Hmong first began arriving in the United States in the late 1970's, life in the United States was very challenging because it was drastically different than life in Laos or the refugee camps in Thailand. Everyday tasks such as communicating with others, purchasing goods, buying food and household chores, to name a few, were overwhelming and challenging.

Initially, in their efforts to try to adapt to life in the United States, the Hmong were heavily dependent on other people such as their sponsors and organizations supporting them. "There were so many roads and cars. We needed someone to take us everywhere, to the store, to our house" (Koltyk 1998, 30). In Laos, the Hmong people were self-sufficient. They grew their own food, made their own shelter, and produced most of the items they used in their day-to-day lives. The contrast between this subsistence lifestyle and life in the United States was substantial. The inability of the Hmong people to be independent was very challenging and disempowering. Immediately upon arrival in the United States, the Hmong began gardening. Tending to small garden plots supplied many Hmong people with food and an extra source of income. It allowed them to be independent. Most importantly, it gave them agency in a part of their lives.

Institutional Support behind the Decision to Farm

Shortly after the arrival of the second wave of Hmong refugees in the mid-1980s, the Hmong began to receive increased programmatic attention. A greater awareness of their unique cultural background and their difficulty in adapting to the United States emerged during this time (Bach and Carroll-Seguin 1986). The challenges experienced by the Hmong increased the openness of organizations to the idea of Hmong becoming economically self-sufficient in alternative ways, most notably through farming. The presence of small gardens

that Hmong planted was an indicator that farming could be a viable alternative for achieving self-sufficiency, and ultimately, assimilation. Due to the acknowledgement of the difficulties the Hmong were having adapting to life in the United States, organizations in the Twin Cities were supportive of the Hmong in their decision to farm for economic self-sufficiency.

The primary goal of the government is to assist refugees in assimilating through economic self-sufficiency. “Achieving economic self-sufficiency is the cornerstone of the U.S. resettlement program and getting a job is the first step towards that goal” (UNHCR 2004). The United States government spends over \$450 million annually for the refugee resettlement program (Fix, Zimmerman and Pascal 2001). Thus, it is in the best interest of the government for refugees to assimilate economically, by becoming economically self-sufficient, as soon as possible. This desire is articulated in the refugee resettlement policy in the United States “To provide sponsorship, reception and placement services appropriate to refugees’ personal circumstances and assist refugees to achieve economic self-sufficiency as quickly as possible” (UNHCR 2004).

The first step to helping refugees achieve economic self-sufficiency is through placing them in entry-level jobs. These are typically low paying, wage labor jobs in the manufacturing industry or the service industry (Koltyk 1998). Hmong adults, who came to the United States with limited English ability and hardly any training in these types of jobs, were very difficult to place in the regular job market. “Their reliance upon a swidden agricultural economy has provided them with little or no readily transferable employment skills” (Strand and Jones 1985, 135). The outlook for the Hmong refugees was grim as one historian articulates,

Even poorer, as groups, are the Laotians, the Cambodians and such pre-modern peoples as the Hmong. Few Laotians and Cambodians and no Hmong were really equipped to cope with modern urban society before they left Southeast Asia...Many of those most directly involved with

these refugees fear that they, or most of them, will become a permanent part of that other America where poverty and deprivation are the rule rather than the exception. (Daniels 1990, 369)

Also, the 1980s, the decade in which a majority of the Hmong came to the United States, was marked by recession. As a result of the downturn of the economy, many people were unemployed. It became exceedingly difficult for Hmong adults to secure jobs in the workforce when they were in direct competition with experienced American workers for the same entry-level jobs (Fass 1986). However, as previously, during the 1980s there was an increase in support for Hmong immigrants. The difficulty of the Hmong in achieving economic self-sufficiency through wage employment in Minnesota was clear to organizations trying to help them.

Organizations were open to helping the Hmong achieve economic self-sufficiency through non-traditional methods. Too frequently, refugees are categorized as a singularly homogeneous group, despite their vast differences (Bach and Seguin 1986). However, this was not the case for the Hmong. Very soon after their arrival in the United States, there was recognition of the Hmong as a unique group of refugees⁸. This acknowledgement of the uniqueness of the Hmong led to a great deal of enthusiasm in support for Hmong farming projects, particularly in Minnesota (Fass 1986).

In the Twin Cities metropolitan region, organizations who became involved included the University of Minnesota Extension Service and the Ramsey County Extension Office, through the Hmong Family Farming Project. Funding for these programs came from foundations, including the St. Paul Foundation and the Northwest Area Foundation, grants and private organizations (Breneman 1983). In 1983, there were approximately 109 families

⁸ Scholars have argued that there was too much emphasis put on the uniqueness of the Hmong refugee experience. It is argued that all refugees' experiences are distinctive and thus should be equally thought of as such (Bach and Seguin 1986).

farming in Minnesota as part of various farming projects. The University of Minnesota Extension Service began one of the largest programs of 35 families farming on 160 acres funded federally and by private donors (Fass 1986). There was a good deal of support for these programs initially because organizations saw the importance of allowing the Hmong to have agency in their quest for achieving economic self-sufficiency. The proceeding analysis of the farming production methods employed by the Hmong will demonstrate how these programs have had varying degrees of success.

II. The Practice of Farming

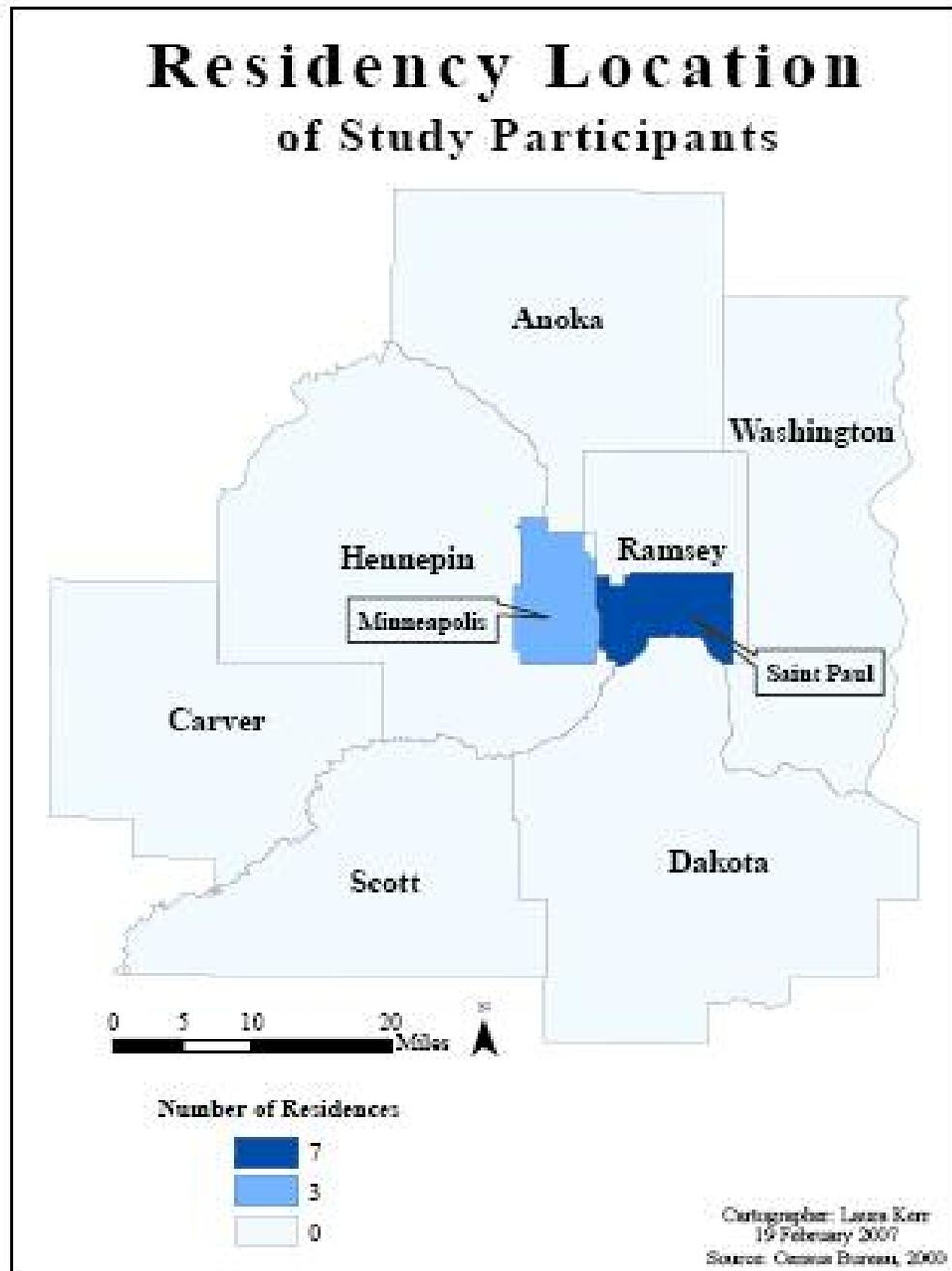
What farming practices and techniques are Hmong growers employing? The current day farming practices of the Hmong in the Twin Cities metropolitan area reveal how the Hmong have adapted from being swidden agriculturalists in the highlands of Laos to farming in Minnesota. This chapter, *The Practice of Farming*, consists of two sections: Findings and Analysis. In the Findings section of this chapter the results of fieldwork are discussed. I examine the geographic location of Hmong farms in the Twin Cities metropolitan area and the farming techniques employed by Hmong farmers. In the Analysis section of this chapter, I argue that land acquisition is the primary barrier to farming success for the Hmong. Additionally, I examine the structural support provided to Hmong farmers and how this support has influenced the farming practices of the Hmong.

Findings

Location of Hmong Farms

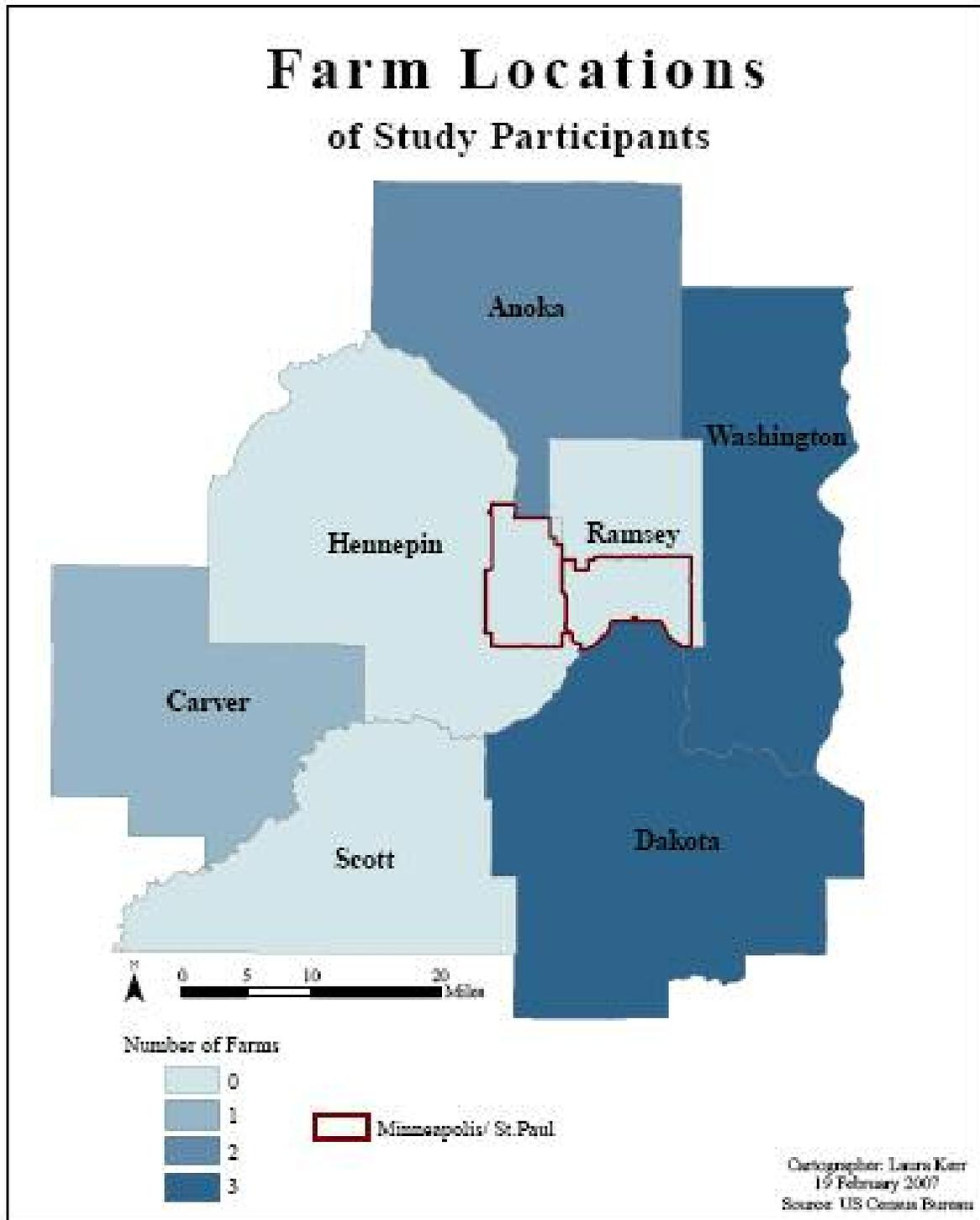
As aforementioned, all the participants in this study reside in Ramsey and Hennepin counties. These are the two counties that encompass the Twin Cities metropolitan area. All the farmers commute from their respective homes in the downtown metropolitan region to their farms by motor vehicle during the growing season. The average commute time to the farm (one-way) is approximately 45 minutes.

The participants in this study all live in Saint Paul or Minneapolis. Their farms however are located in four counties: Anoka, Carver, Dakota and Washington⁹. The distribution of farms in those counties is displayed in the map below:



Map 5: Distribution of Residences of Study Participants

⁹ While individual level data were collected for this study, to maintain the anonymity of the farmers who took place in this study county level data are the only spatial data that are disclosed about the farms.



Map 6: Distribution of Farms of Study Participants

From interviews with farmers and key informants about where Hmong farmers are located generally, the most frequently listed places were Afton (Washington County), Forest Lake (Washington County), Blaine (Anoka County), Rosemount (Dakota County), Hastings (Dakota County) and Chaska (Carver County). Thus, it can be deduced that the sample of farms in this study is a fairly representative sample of the spatial distribution of Hmong farms in the Twin Cities. While outside the geographic scope of this study, it is worth noting that Northfield, Minnesota and St. Croix, Wisconsin were noted as places where Hmong farms were also located.

The spatial distribution of Hmong farms in this study can be characterized as scattered with some identifiable trends. According to Yimeen Vu, of the Minnesota Food Association, Hmong farmers are “All over and geographically very spread. They are about an hour from Twin Cities in all directions. Basically wherever they can rent land for a price they can afford” (Vu, personal communication). While Hmong farmers do prefer to be in close proximity to each other, general spatial trends show this not to be the case. The geographic scattering of Hmong farms in the metropolitan area can be attributed to land acquisition methods of Hmong farmers.

Land Acquisition

The vast majority of Hmong farmers in Minnesota rent their farmland (Schermann, personal communication; Vu, personal communication; Olson et al. 2003). Renting land is the only viable option for many Hmong farmers who can simply not afford to buy cropland, especially in the metropolitan area where land prices are high. The average price for farmland in a 50-mile radius of the Twin Cities is \$3,000-\$5,000 per acre (USDA 2003, 8). Eight of the ten participants in this study rent the land they currently farm. If a farmer must rent their

farmland, their options of farm location are greatly limited by the availability of rental land. Thus, the high frequency of farming rental land among Hmong farmers explains the geographic scattering of farms across the Twin Cities metropolitan area.

Land rental arrangements vary widely in this study. Farmers pay a range of \$100-\$400 for the land on which they farm. Some of the farmers do not pay a fixed price but instead, have a range of informal arrangements with the landowners. Sharecropping is one such informal arrangement in which farmers give landowners produce and work on the landowners farm for a period of time. Acreage ranges from two acres to twelve acres. A study of Hmong farmers completed by scholars at the University of Minnesota in 2003 found the average farm size to be 3 acres (Olson et al. 2003). According to the 2002 Census of Agriculture, the average farm size in Minnesota was 340 acres (Minnesota Agricultural Statistics Service and USDA 2002).

Two farmers in the study purchased their own farmland. These farmers still live in the cities but own land outside the cities. There is a growing trend of Hmong farmers buying farmland (Gerten, personal communication; Vu, personal communication). These farmers have farmed for a longer period of time than the farmers who rent the land they farm on. The average size of these farms is 15 acres. One of the farmers in this study rents small tracts of the land they own to other Hmong farmers, who are farming for profit and for subsistence. According to the farmer, "That is why where we are today. We cooperate with each other. Community is very important to the Hmong" (Farmer F, personal communication). Working together has been a survival strategy for Hmong refugees in the United States (Koltyk 1998; Chan 1994). This has been the case for Hmong trying to support themselves through farming. When one farmer is successful enough to purchase their own land, they help their extended families and friends particularly those refugees who

have recently arrived in Minnesota by giving or renting land for them to farm (Vu, personal communication). As land ownership among Hmong farmers rises, it is likely that more arrangements similar to this one will arise, and more Hmong will be able to farm.

Farm Production Methods

While farmland sizes vary in this study, the farm production methods employed by all the farmers are very similar. The methods used by farmers can be described as a hybrid of traditional and modern techniques. “A number of traditional agricultural practices are carried over into the current practices of Hmong farmers in the United States” (Schermann et al. 2003). Additionally, western farming methods influences some techniques and tools employed by the Hmong currently.

None of the participants in this study employed labor. All the farms relied on immediate and extended family labor. Hmong farms are fairly small in terms of acreage, they employ farming production methods in order to productively use “every last square inch” of the space they have (Vu, personal communication). One farmer described her use of the land she farms as “very efficient” (Farmer D). All the farmers employ an intercropping method. However, instead of planting crops in rows, most farmers plant their crops in a patchwork pattern. Seeds are scattered amongst each other. “If you are growing corn, there are beans growing between corn stalks. If you are growing tomatoes, hot peppers are right next to them. Rows don’t exist” (Vu, personal communication).

Most of the farmers do everything by hand solely using hand tools. They use Western tools including rakes, hoes and garden shovels. Farmers said they bought these hand tools at Home Depot and other supply stores. Traditional tools are also used. These tools are very similar to the tools used in Southeast Asia. They are used for soil preparation,

planting, cultivation and harvesting. These tools were purchased at Asian markets. Half the farmers use some mechanized farm equipment including gas-powered rottotillers for planting. Two of the farmers, whom both have ten or more acres of land, use tractors for plowing the ground. Both these tractors were previously owned and quite old. One of the farmers has made modifications to the tractors so it better fits the farms' needs.

A variety of methods are used to control weeds and insects. The most common way of control weeds was through hand hoeing. All the farmers commented on this as being a time-consuming but necessary process. Crop rotation is another method used by all the farmers. "We rely most on crop rotation. Lots and lots of crop rotation" (Farmer C, personal communication). Only one farmer used herbicides. To control insects, all farmers use crop rotation. Two farmers said they use pesticides to deal with their pest issues. Another method employed to control pests is to not plant certain crops that bring on pest problems. One farmer explained that the family avoided planting tomatoes because they brought pest problems to the farm. Though seven of the farmers in this study use no chemicals on their fields, none of the farms are certified organic. Michele Schermann, of the University Minnesota School of Agricultural Healthy and Safety, who has done extensive fieldwork on Hmong farms remarks,

I never saw them use pesticides though I saw pesticide containers and spray packs but I never saw them used or moved. They were always in corner and covered in dust. But I never saw anyone use any pesticides and I have been out there for hours and hours all times of the day. (Scherman, personal communication)

There was a general sense of ambivalence among the farmers in regards to inorganic inputs. All the farmers, both those who used inorganic inputs and those who did not, were very conscious of the problems associated with these chemicals. The farmers who decided

not to apply chemicals to their fields did so for three primary reasons. First, they did not see them as being safe for their families to be around in the fields (Farmer A, personal communication; Farmer D, personal communication). Second, they found they were more successful at the market when they could tell the customers that they did not use chemicals (Farmer C, personal communication). Last, one farmer said the chemicals were expensive and stopped working as well over time (Farmer D, personal communication).

The farmers grow a variety of crops for market each season. The farmers grow primarily vegetables and herbs. The most frequently listed vegetables and herbs grown by the farmers were tomatoes, green onion, lemongrass, eggplant, cilantro, potatoes, peppers, cucumbers, bitter melon, basil, squash and Asian greens¹⁰. All the farmers grew a mix of traditional crops (such as lemon grass, bitter nightshade, Asian greens etc.) as well as Western crops. An emerging trend among Hmong farmers is flower production. A number of farmers in the metropolitan area have become successful through growing flowers (Vu, personal communication; Schermann, personal communication). While there are some Hmong farmers in the area who exclusively grow flowers, in this study those who grew flowers still grew vegetables and herbs. The number of crops grown by each farm ranged from 8- 25. The average number of crops grown was 14.

There were numerous motivations for growing particular crops. The primary reason for growing certain crops was market value. All the farmers said the primary reason to plant certain crops was the profit margin. For example, one farmer explained, “Beans and tomatoes are a lot of work. But they are also a lot of money so we grow them” (Farmer D, personal communication). Customer demand was also a primary motivation for growing certain crops. As one farmer explains, “We started growing traditional crops for ourselves

¹⁰ For extensive list of all crops grown by the farmers, refer to Appendix C.

but people at the market liked them and now we grow more” (Farmer B, personal communication). Customer demand has the power to change the decisions made by the farmer regarding what they grow. Since the farmers market is the primary market for Hmong growers, they are intimately connected to the consumer and thus, consumer demand. Additionally, many farmers explained that they decide what to plant based on the growing season for a particular crop. Other reasons that came up as motivations for choosing certain crops were crop seasons and cultural background. The numerous motivations for growing particular crops demonstrate how the Hmong farmers are intimately linked to the land and their cultural background and heavily influenced by their market.

An examination of production costs (including seeds and transplants, insecticides, herbicides, fertilizer and hired labor), revenue (total profit from goods) and net farm income (the difference between total revenue and total expenses) allows for a useful comparison of Hmong farmers and average figures in Minnesota from the 2002 Agricultural Census. In order to compare production costs and revenue, figures must be adjusted for acreage.

	Average Hmong Farm in MN ¹¹	Average Farm in MN ¹²
Average Farm Size (in acres)	5	340
Average Total Production Costs	\$3,000	\$90,226
Average Total Production Costs/ Acre	\$265	\$70
Average Total Revenue	\$12,000	\$114,057
Average Net Farm Income	\$9,000	\$23,831
Average Net Income/ Acre	\$1800/acre	\$600/acre

Table 3: *Calculations of production costs, total revenue and net farm income for Hmong farmers and the average farm in Minnesota*

As this table displays, production costs per acre for Hmong growers are higher than the average farmer. This can be attributed to the sheer volume of crops being grown on a single acre. Also, the table shows that the average net income per acre for the average Hmong grower is \$1,800 while for the average farmer in Minnesota is only \$600 per acre. This demonstrates that Hmong farming operations are significantly more lucrative per acre than the average farming production.

¹¹ Data are a hybrid of information obtained from Olson et al. 2003 and fieldwork completed in fall 2006.

¹² Data obtained from 2002 Minnesota Agricultural Census (Minnesota Agricultural Statistics Service and USDA 2002).

Analysis

This analysis critically examines the barriers Hmong farmers face in the practice of farming and the structural support Hmong farmers receive addressing these barriers. The primary barrier to farming success is land acquisition, specifically the high number of Hmong farmers who rent the land on which they farm. In order to demonstrate why this is the biggest challenge to Hmong growers, I explore why Hmong growers do not own their farmland. Then, I lay out the consequence associated with farming rented land. Institutions have played a role in assisting Hmong growers to overcome the barriers they face in their quest to be successful farmers. This analysis provides a critical overview of early structural support of Hmong farmers, the influence of this support on Hmong farming practices and the resulting farming systems the Hmong have developed.

The Primary Barrier to Successful Farming

Why Do Hmong Farmers Rent Farmland?

The primary barrier faced by Hmong farmers in this study is not directly related to farming, but rather gaining access to land to farm. Every informant, both farmers and key informants, identified access to land as a major challenge to farming success for Hmong growers. As previously discussed in the findings section, the majority of Hmong farmers in the Twin Cities metropolitan region do not own the land they farm. Instead, they rent land from a variety of individuals and companies. This is the case for eight of the ten participants in this study. These farmers do not own their land because of the high cost of land in the Twin Cities metropolitan area.

There are programs to help farmers obtain the money necessary to purchase land to farm. Most notable of these programs is the Farm Service Agency's Farm Loan Program. As part of the United States Department of Agriculture, FSA loans are given to family-size farmers who are unable to obtain commercial credit from a bank (Farm Service Agency 2006). The Hmong are good candidates for FSA loans. While these loans are an ideal way for Hmong growers to secure funds to buy farmland, very few Hmong farmers have utilized this program (Vu personal communication).

There are three primary reasons more Hmong growers do not participate in these programs. Firstly, many Hmong growers are not aware of the existence of the FSA's Farm Loan Program. "These types of programs are off our radar. We did not know they existed for a very long time" (Farmer D, personal communication). Secondly, in order to qualify for a FSA loan, there are substantial amounts of paperwork and bookkeeping that must be completed. One farmer explained that they were not able to complete the paperwork because their English was not good enough (Farmer C, personal communication). Lastly, a number of Hmong growers do not actively seek to participate in these programs because they fear by participating they will lose other government benefits they are receiving (Farmer I, personal communication; Vu, personal communication). "There is this fear of governmental agencies. That if you work with an agency, they are going to turn around, come back and try to take away some other benefit you are receiving from some other program" (Huginin, personal communication). Primarily, these informants are referring to welfare. Hmong farmers who are on welfare do not report their earnings from farming, especially those who have very small farming operations (Kolytk 1998; Corlett 1999). When farmers, for a variety of reasons, are not able to buy farmland and must continue to rent land, they face many barriers to farming successfully.

Limitations of Farming Rental Farmland

Renting farmland can be a severe limitation to success for farmers for numerous reasons. A farmer who is farming rented land is never guaranteed the same plot of land for more than one season. While a couple of farmers have been able to farm the same piece of rental land for numerous years, the majority of farmers have farmed different parcels of land during each growing season. This has primarily been a result of land being sold to developers. "Land in the Twin Cities metropolitan area is expensive. When the farmer renting land to the Hmong decides he is ready to retire and make 3, 4 or 5 million dollars on a couple acres for a housing development, the Hmong farmers are displaced" (Schermann, personal communication). This is reflective of a larger trend in the region, the increase of suburbanization and sprawl in the metropolitan area and subsequent decrease of agriculturally productive lands. In Minnesota, two programs, funded by taxpayer dollars, have been implemented to try to protect farmland: Green Acres and Agricultural Preserves (Greden and Taff 1994). Despite the implementation of these protective measures, suburbanization and sprawl remain an imminent threat to Hmong farmers who farm in the metropolitan area.

When a farmer is not guaranteed to farm the same land for more than one season, decisions on what crops to grow are limited. Perennial crops cannot be grown. Perennial crops such as strawberries and raspberries are highly profitable specialty crops. When a farmer is not growing on the same land each year, they are not able to grow these specialty crops. Additionally, farmers are generally ineligible to apply for organic certification. The United States Department of Agriculture's National Organic Program adheres to a strict certification process. In order to be certified, farmland must be free of chemicals for at least

three years (National Organic Program 2000, 45). When a farmer is renting land on a season-to-season basis, and frequently relocating, this requirement becomes almost impossible to fill. Thus, many Hmong farmers are unable to become organic certified. The organic market is yet another profitable, niche market rendered inaccessible to Hmong farmers who rent land¹³. Renting land to farm greatly inhibits Hmong farmers in achieving success as farmers.

Assistance in Overcoming Barriers

As discussed in the chapter *The Decision to Farm*, there was recognition of the difficulties the Hmong were having in adapting to life in the United States. The Hmong were viewed as a refugee group with unique circumstances. As a result, many organizations in the Twin Cities supported farming as a method of achieving economic self-sufficiency and assimilating into mainstream American culture. As a means of support, a handful of organizations not only supported this decision to farm; they became involved in assisting the Hmong in the practice of farming. This section critically examines the systems of knowledge, techniques and methods used in programmatic efforts to assist Hmong farmers.

Institutional Support in the Practice of Farming

Programmatic support for Hmong farmers commenced in the early 1980s. Initial assistance came primarily from the Ramsey County Extension Office and was expanded by the University of Minnesota Extension Service (Breneman 1983; Fass 1986; Moore 2001).

¹³ The study participants who own their farmland are not certified organic either. There are two reasons for this; first, it is expensive to get organic certification. Also, the legalities and paperwork of organic farming are extensive and can be very difficult for people to understand.

Land access was identified by these organizations as a problem for Hmong growers immediately. In order to address this issue, the Hmong Family Farming Project, run by the Ramsey County Extension Office, initially provided small plots of land to Hmong who wanted to be involved with the program. However, as the program was taken over by the University of Minnesota Extension Service, it became increasingly focused on assisting Hmong who already were leasing land with proper farming practices, as opposed to helping Hmong secure leases or ownership of land.

The early programs run by the Extension Service focused on teaching western farming practices to Hmong growers. “When the Hmong first came over here, a lot of people went through the University of Minnesota’s Extension Programs where they were being shown how to grow conventionally” (Vu, personal communication). The farming landscape in the United States, including Minnesota, can be predominately characterized as conventional or modern in nature. Large farm sizes are typical of modern agricultural systems. For example, as previously mentioned, the average acreage of farms in Minnesota is 340 acres. Highly specialized production is the norm. In Minnesota, soybeans and corn are the primary crops in terms of acreage (Minnesota Agricultural Statistics Service and USDA 2002). Crop monocultures have become prevalent. Industrial agriculture is characterized by mechanization and high inorganic inputs.

While the Hmong did not have access to large plots of land, programmatic efforts were focused on teaching the Hmong to grow conventionally on their small plots. Programs showed farmers the monocropping technique. “We were shown to plant our crops in long rows. This is not the Hmong way” (Farmer D, personal communication). Farmers were introduced to tools such as tractors and rototillers to aid in farming. “We did everything by

hand. But then we were shown to use rototiller and tractor. We still use a rototiller today” (Farmer C, personal communication).

Programs encouraged the farmers to use conventional, inorganic inputs to control pests and weeds as well as fertilizers. “Hmong growers were taught to spray everything with pesticides and herbicides” (Vu, personal communication). The Extension Service encouraged proper pesticide and herbicide use by offering spraying certifications. “The Extension Service would come out and visit our farm in the early years. They would teach us how pesticides and fertilizers were good for our crops and would show use how to use sprayers” (Farmer I, personal communication). The early programmatic efforts focused on Western growing techniques through encouraging growing monocultures, using mechanized tools and by encouraging the use of pesticides, herbicides and fertilizers.

Motivations behind Early Programmatic Efforts

The organizations involved with Hmong farmers recognized the Hmong possessed extensive farming knowledge, as a result of their agrarian background. This is why there was support initially for Hmong who desired to farm. Nonetheless, early programmatic efforts were focused on teaching conventional, western methods of farming to the Hmong. In reference to their early work with the Hmong, the manager of the Hmong Family Farming Project commented, “There were no efforts to help them [the Hmong] make their farming successful. We’re trying to teach them the American way” (Gensmer in Breneman 1983). Though from an agrarian background, the Hmong were swidden agriculturalists in Laos. Their knowledge and systems of farming were viewed as primitive and non-adaptable to the fields in Minnesota by organizations assisting them. Therefore, organizations focused on the importance of teaching “the American way” of farming.

Governmental policies in the United States concerning immigrants are still driven by the fundamental goal of economic assimilation. Achieving economic self-sufficiency is deemed the cornerstone for achieving assimilation by the United States government (Strand and Woodrow 1985). This theory of assimilation through economic self-sufficiency heavily influenced the way in which early programmatic efforts assisting the Hmong, particularly the Extension Service, were run. In the farming context, assimilation theory translated into farming programs that focused on teaching western farming techniques. Agricultural assimilation occurred. Early programs assisting Hmong farmers were accepting of farmers' decision to achieve economic self-sufficiency through farming. Nonetheless, these organizations supposed it necessary to assist Hmong farmers by teaching western farming techniques. These conventional techniques were taught because there was an underlying belief that if the Hmong adopted this method of farming, they would be more successful and thus, closer to achieving economic self-sufficiency and thus, assimilation into society.

Embedded in the belief Hmong farmers would only achieve success through utilizing western farming methods, is an acceptance of the superiority of modern farming techniques over traditional techniques. Conventional agriculture arose out of advances in biochemistry and engineering in the early 20th century. These advances greatly changed agricultural systems and farming practices. Technological advances during World War II spurred intensive use of pesticides and fertilizers as well as large-scale irrigation. A widespread belief emerged during this era that modern agriculture produces higher yields and cheaper food (Moseley 2007). As a result, "modern, high-input, 'green revolutionary' systems were being proposed as superior to those of traditional communities" (Robbins 2004, 33). Traditional systems were viewed as having cultural significance but being inefficient (Netting 1993). Furthermore, traditional agricultural systems, in particular the swidden method practiced by the Hmong, were

deemed environmentally destructive. The superiority of conventional agriculture remains the dominant narrative to this day. This narrative greatly influenced the Extension Service in their efforts to teach Hmong farmers western farming techniques.

Of late, modern agricultural systems have fallen under increased criticism. Western agriculture is increasingly seen as problematic for a variety of reasons. As a result of the industrialization of agriculture in the United States, the number of farms has decreased. Farms have become highly specialized and capital intensive. Evidence has revealed that conventional agriculture systems have numerous environmental and ecological impacts (McIsaac and Edwards 1994). These include, but are not limited to, excessive water usage, declining soil fertility, pest outbreaks and the subsequent “pesticide treadmill” effect which leads to increased use of inorganic inputs (Moseley, 2007).

Due to increased realization of the problems associated with modern agriculture, there has been a renewed interest in the viability of alternative agricultural production methods. The organic movement, which emerged on a widespread scale in the 1980s, is one example of an increasingly popular alternative to conventional agriculture. Additionally, there has been renewed interest in traditional, small-scale agricultural systems. Modern agriculture is viewed as more productive and economically efficient. This dominant narrative has been debunked as a myth. Small-scale agricultural systems are not necessarily less productive. In fact, these systems are frequently more economically cost efficient, productive and sustainable (Carroll, Vandermeer and Rosset 1990; Netting 1993). The agricultural systems of the Hmong provide an excellent example of the viability of a small-scale approach.

The Influence of Institutional Support on Hmong Farming Practices

The Hmong came to the United States with an intimate knowledge of their traditional agricultural practices. While farming in the United States, through the University of Minnesota Extension Service and other programs, the Hmong have been exposed to another agricultural system, which can be characterized as conventional in nature. The Hmong have incorporated aspects of the modern agricultural model taught by the Extension Service into their farming practices. At the same time, they have retained numerous traditional techniques. The Hmong have used their knowledge and skills to adapt both these systems to create a hybrid that is economically and ecologically viable given their parameters.

Conventional agricultural systems and traditional agricultural systems have frequently been studied in contrast to each other, as two separate and isolated systems. This study of Hmong farmers provides a unique case study in which two separate and seemingly irreconcilable systems intersect. Due to forced migration, the Hmong have adapted their agricultural livelihood from the isolated highlands of Laos to a bustling metropolitan region in the United States. Hmong farmers have received assistance from organizations that have taught conventional farming techniques. Yet, the Hmong farmers in this study rejected many of the farming techniques they were taught by these programs. The resulting farming system that is typical of Hmong farms is a hybrid system in which select traditional and western techniques are utilized.

As discussed in the findings section of this chapter, the Hmong have carried over a number of traditional techniques. These techniques and practices include intercropping, utilizing organic methods of pest control, working primarily by hand, use of traditional tools, employing solely family labor and planting traditional crops. Additionally, selective western techniques and practices have been adopted by many of the farmers in this study. These

techniques and practices include selective use of mechanized farm equipment, some use of inorganic inputs and the planting of typically western crops.

In his book, *Political Ecology, Mountain Agriculture and Knowledge*, Jansen (1998) presents the concept of “knowledge configurations” to reject the dichotomy too often set up between traditional and scientific knowledge systems. Knowledge configurations are “multi-layer forms of knowledge which interweave, hybridize and creolize continuously” (192). The way in which Hmong farmers have adapted their traditional agricultural knowledge system and the western agricultural knowledge system is a manifestation of the knowledge configuration presented by Jansen. Hmong farming techniques are a hybrid, a creolization, of two approaches to farming.

Hmong Farming Systems: Motivations for Developing a Hybrid Approach

The system of farming employed by the Hmong is best described as a hybrid approach in which they employ both traditional techniques and selective western practices. It is very important to understand the reasons that Hmong farmers did not fully accept and utilize the traditional techniques they were shown by the Extension Service and have instead adopted a hybrid approach. Their motivations fall into two categories: economically and ecologically driven reasons.

The hybrid system of farming the Hmong have developed allows them to farm within their economic means for profit. A defining characteristic of modern agriculture is the high costs with which it is associated. The average modern farm has approximately \$500,000 invested in machinery (USDA 2003, 8). The Hmong farmers in this study had an approximate average of \$4,000 invested in machinery. “We use a rottotiller but not more. It is too expensive. Instead we work very hard” (Farmer A, personal communication). They are

able to rely on time intensive, manual labor as opposed to machinery to save money.

Farming is a secondary source of income for the majority of farmers in this study. Since there is this extra source of income, many farmers have the necessary funds to buy inorganic inputs, as well as mechanized farm equipment. However, they have decided to not spend money on mechanization and inputs.

Conventional farms also spend a significant amount of money on inputs for their fields. In contrast, Hmong farmers primarily rely on labor-intensive, organic methods. “When we first went through training [with the University of Minnesota Extension Service] they taught us to spray but we stopped. It was too much money” (Farmer D, personal communication). Modern farms are very large, an average of 340 acres in Minnesota, while Hmong farms are much smaller, usually 10 acres or less. Hmong farmers are able to save money by only renting a few acres and therefore, “they make use of every single square inch” (Vu, personal communication). By using significantly less resources than the average conventional farm and instead relying on manual labor, farming by hand and relying on primarily organic production methods, Hmong farmers save significant amounts of money. Thus, farming becomes more profitable.

Lastly, the decision not to adopt conventional farming techniques, particularly the use of inorganic inputs, is a market driven decision. Hmong farmers sell produce almost exclusively at local farmer’s markets. Customers at these markets are generally very concerned about how the produce they are buying is grown. “I think they [Hmong farmers] know customers will come and say ‘Are these organic?’ and they will say ‘We don’t own the land but they are organically grown’. Often they have signs that say ‘No chemicals’” (Schermann, personal communication). The Hmong farmers in this study were very aware that their customers were concerned about chemicals being used. “They [the customers]

always ask ‘Is this organic?’ We know they will always ask” (Farmer I, personal communication). Thus, for Hmong farmers rejecting the conventional methods of applying chemicals to fields are a rational economic decision. The desire to use organic methods of farming is driven not only by customer demand but also by concern for customer health. “If you sell it [produce grown with chemicals] to someone to eat, you won’t have a clear conscience” (Informant in Schermann et al. 2006). This awareness of customer safety demonstrates how ecological reasoning also influences farming choices.

Decisions made by Hmong farmers to farm using a hybrid method are not purely economical. Ecological reasoning motivates Hmong farmers to use certain farming practices. Primarily, ecological concerns about conventional farming practices have led many Hmong farmers to avoid pesticide use. Though early programs run by the Extension Service taught proper use of these chemicals, many Hmong farmers were still skeptical about using them. Firstly, this skepticism is driven by family health and safety. “My whole family is in the field. My children work with me. I don’t know if those [pesticides] will cause problems for my family” (Farmer C, personal communication). An informant in a study conducted on agricultural tasks in Hmong farming communities conveys the same sentiment, “Children are always walking. If you take your small children into the fields they will remove their shoes and will get chemicals on their feet. In the beginning there might not be a problem, but later on...there will be problems for your family” (Schermann et al. 2006). Since Hmong farmers rely on familial labor, there is an acute awareness of the impacts of farming practices on their families. The desire to keep one’s family safe and healthy has driven the Hmong to adhere to certain ecological practices.

There is also awareness that these inputs, while initially very effective, lose their effectiveness over time. As one informant in the recent study on Hmong agricultural tasks

articulates, “If you have to spray once a week so the bugs won’t infest a particular crop, then maybe it’s better not to raise that crop since you would have to apply pesticides so heavily” (Schermann et al. 2006). One informant in this study commented, “We tried to grow tomatoes but pests kept eating them. We tried spraying but we had to spray more and more. We don’t grow tomatoes anymore.” (Farmer H, personal communication). The farmers are aware of the effects of these chemicals. The awareness of the ineffectiveness over time has led some farmers to cease using them.

The Hmong have rejected numerous techniques they were taught by the Extension Service, and instead developed a hybrid approach to farming. However, there are residual effects from the early programmatic efforts aimed towards teaching Hmong farmers conventional techniques. “People say they will never buy from Hmong because they think they spray everything all over the place. But I have never seen it. Never.” (Schermann, personal communication). This customer perception of Hmong farming practices could very well have been formed in the days when Hmong were being encouraged to use conventional growing techniques. These programs, while well intentioned, have possibly affected Hmong farmers’ ability to market their produce, as will be discussed in the next chapter.

Early programmatic efforts were aimed at helping the Hmong achieve economic self-sufficiency through farming. This program design to teach the Hmong conventional farming techniques was grounded in a mentality that conventional farming practices are more effective, and thus superior, to the traditional techniques employed by the Hmong. The Hmong did not fully-accept the western system of farming they were shown because this system was not an economically and ecologically rational system of farming given Hmong farmers’ parameters. Instead, they have adapted their traditional agricultural system to their new environment, adopting only selective methods from the conventional agricultural

system. The result is a hybrid system that is ecologically and economically feasible, profitable and sustainable.

III. Markets and Marketing Strategies

Where do Hmong growers market their produce and what marketing strategies do they utilize? To farm for profit successfully, first a farmer must grow the best product possible. However, farming skills are only half of the process. In order to be profitable, a farmer must find markets for their produce and develop an effective marketing strategy. This examination of markets and marketing strategies for Hmong growers is broken into two parts: Findings and Analysis. In the findings, the results of fieldwork are outlined. I examine where Hmong farmers sell their produce as well as the marketing strategies utilized by Hmong farmers. In the analysis, the primary barriers to marketing success are scrutinized. The programs in place to help farmers overcome these barriers and the role of governmental agricultural agencies are discussed.

Findings

Markets for Hmong Farmers

The exclusive markets for the produce of the Hmong farmers in this study are farmers' markets in the Twin Cities metropolitan area. All the participants in this study market their produce at farmers markets. The number of farmers' market locations at which each grower sells their crops varies from only one market to six markets. The average number of market locations at which farmers sold their produce in the last year was four markets.

Farmers will sell at different markets on different days, depending on the availability of space at the market, as well as the days the market operates. Farmers are able to sell at numerous markets through out the week because they have so much extended family

support. While the most experienced farmers are working in the fields, other family members can be at the market selling produce. The older generations of families are usually the farm managers while the younger generations assist them. Therefore, it is usually the younger family members who have less farming skills who end up more frequently working at the market. “Our parents work the fields. We work the markets. I enjoy working at the market. My parents enjoy working in the fields” (Farmer J, personal communication). Frequently younger family members have better English language skills and therefore, it makes sense for them to work at the market.

Each farmer who participated in this study listed the most popular farmers’ markets for Hmong growers. The most commonly mentioned markets (in ranking order) were the downtown Saint Paul farmers’ market, the Minneapolis market at Lyndale, the Aldrich Arena market and the Nicollet Mall market. The most popular market is the downtown Saint Paul market on Saturdays. As one grower explains, “It [the downtown Saint Paul farmers’ market] is best. It is well organized and profitable. We always do well there” (Farmer D, personal communication). The desired qualities in a market were organization, high customer traffic and convenient location. Also mentioned as important were the price of membership and having a community of Hmong growers at the market (Farmer A, personal communication; Farmer F, personal communication).

According to Jack Gerten, the manager of the Saint Paul farmers’ market, the favored market in this study, the Hmong have been a part of the market since the 1980s. Approximately 35% of the total members of the Saint Paul farmers’ market are Hmong (Gerten, personal communication). Membership at the market is based on seniority. Therefore, senior members of the market sell on the more profitable day (Saturday) while newer members are reserved spots on the day with less traffic (Sunday). Gerten says there is

a waiting list to gain membership into the market. While there is a high Hmong membership at the market, a number of Hmong farmers are still on the waiting list for the market (Gerten, personal communication). In the 1980s, the waiting list for the market was significantly higher. However, due to a higher demand for local produce and farmers' markets, more markets have opened up providing more space for growers (Gerten, personal communication).

Every farmers' market is run differently but there are common terms on which most markets operate. Each market has fees that growers must pay in order to sell their produce at the market. Fees paid by growers in the study ranged from \$50-\$250. The average total paid for membership fees in an average year is approximately \$120. With a membership fee, growers are given a stall from which to sell their produce. The market is member run and the growers make all the decisions pertaining to the market. The Hmong members of the market "take it [the market decision-making process] more seriously than other growers" (Gerten, personal communication). As discussed previously, farmers' markets are the only markets for the growers in this study. Therefore, it is logical that Hmong growers would take the marketing decisions made by the farmers' markets very seriously as well as their own marketing decisions.

Marketing Strategies and Logistics

Marketing strategies among Hmong growers vary greatly. Three of the participants in this study have marketing plans. The other participants do not explicitly have marketing plans written up. Whether or not growers have articulated marketing strategies, each farmer has methods by which they market. Successful marketing strategies typically are comprised of numerous stages. It is useful to break marketing into five distinct stages: research,

planning, pricing, product strategy and promotion (Block 1992). Each farmer in this study has specific strategies in each of the stages by which they adhere to and varying degrees of success with those strategies.

The research stage of marketing is the stage in which a farmer gains a better understanding of their customer. “You need to know who your customers are, where they live, what they buy, how they buy, when they buy, and who influences their purchases. Additionally, a marketing oriented producer wants to know about customer needs that are not being satisfied” (Block 1992, 1). Due to monetary and time limitations, none of the farmers in this study explicitly conduct market research. However, informal research is conducted. “We listen to our customers at the market. What they like, what they don’t like. This is how we decide what to plant” (Farmer B, personal communication). Unlike other markets for produce in which the grower rarely comes in direct contact with their customer, farmers’ markets are a form of direct marketing. Due to the interactive nature of these markets’, Hmong growers are constantly receiving feedback and conducting informal market research.

Planning involves digesting consumer research and making a comprehensive strategy to best fulfill customer demand. This stage of marketing involves the creation of a written program articulating goals. “Market-oriented farmers incorporate in their plans a precise definition of who their target market is, and focus their time and resources on that target exclusively” (Block 1992, 1). Successful planning for small farmers involves finding a niche market and capitalizing on this. “The most successful Hmong farmers know their market. They work with their clientele, who are predominately white and middle class. And they grow things that not everyone else is growing” (Schermann, personal communication). Some of the farmers in this survey have been very successful planning and finding a niche market.

“We used to sell produce, what everyone sells: tomatoes, potatoes, onions etc. Now we focus on special things. Lot of traditional produce that people can’t find everywhere” (Farmer C, personal communication). Flower production is yet another niche market that some Hmong farmers have moved into. The farmers who have found these niche markets were generally more positive about their business and more profitable than those who grew the typical produce found at local farmers’ markets.

Deciding how to price produce is “a huge challenge for all small growers” (Gerten, personal communication). Most of the growers in this study mentioned having difficulty pricing their goods initially. “It was very hard to figure out what was too low and also what was too high” (Farmer G, personal communication). “Over time it [pricing] has gotten easier but at first, we had a lot of trouble with it” (Farmer D, personal communication). The difficulties Hmong farmers initially ran into caused stress between Hmong and non-Hmong growers at the farmers’ market.

The perception is that the Hmong growers will drop their price first as a reaction to ‘Oh my gosh, what if I don’t sell everything I brought to the market today’. I better price myself below the other sellers because those people are known and they have a client. I have to be less expensive if I want to sell my produce’. When they drop their prices it puts pressure on other growers to say ‘Will I drop down to match?’ It creates hard feeling and tension. (Huginin, personal communication)

While pricing remains a challenge to Hmong growers, it has become easier as growers have gained more experience and a greater understanding of farmers’ market economics.

Since Hmong growers market their produce at farmers’ markets, product strategy and promotion become inextricably linked. The product strategy stage of marketing involves marketing your product in a way that will appeal to buyers. While producing high quality produce is the most important aspect of growing, customers’ purchasing decisions are based on more than selecting the best quality produce. “Customers are not simply purchasing

material items with characteristics resulting from your combining soil and water. They are really purchasing a bundle of benefits and attributes, which are sometimes simply symbolic, and often a result of their perceptions” (Block 1992, 2). Product strategy in the farmers’ market context involves cleaning produce and displaying it in an aesthetically pleasing and organized manner. This is new for many Hmong farmers. Product promotion was difficult for farmers’ at first because of cultural barriers. “In Laos, people would just throw their produce in a pile, fresh out of the ground and it would sell. Here, though, it is much more complex” (Farmer D, personal communication).

All the growers in this study recognize this as a critically important step. Some growers feel they have a real sense for product strategy and this has contributed to their success. “We make our produce look nice. We clean it well, and display it well. We were the first to use display bins for our produce, it has helped a lot. This is why we are so successful” (Farmer I, personal communication). “Other farmers stands are messy and disorganized. That is why they don’t get good business” (Farmer D, personal communication). Connected to farmers’ success with product strategy is how well they advertise their product.

Product promotion at farmers’ markets is critical. Promotion is usually in the form of signage and developing personal relationships with customers. Many growers at farmers’ markets are selling similar goods. The difference between a successful and not so successful farmer can be a single sign.

Before 2006, you hardly saw any Hmong farms with banners advertising themselves at the farmers’ market. You are starting to see more of that now because people are getting a sense of that. ‘Oh yes, if I put up a banner and display my vegetables in a certain manner, the customer is more likely to buy from me’

(Vu, personal communication)

Only half the participants in this study have advertisements for their farms at the farmers’ markets. “If they don’t have signs up, then the customers are not going to remember where

they just where. And then one Hmong person is the same as the next Hmong person and you don't have any repeat customers" (Vu, personal communication). Other promotional efforts for Hmong farmers come from the promotional materials of the farmers' markets themselves. Numerous promotional materials for farmers' markets highlight certain farmers. This can be a very beneficial way for customers to understand why there are Hmong farmers at these markets. In the farmers' market context, the most successful form of promotion is customer relationships. "If we develop a friendship with a customer, we know they will come back each week and also tell their friends. We work hard to develop these connections" (Farmer D, personal communication). For Hmong farmers, language barriers and cultural differences can impede this process. "We have trouble because our English is not good. We can't answer all customers questions." (Farmer E, personal communication). Developing these connections is essential at farmers' markets but can be very difficult for Hmong farmers who do not speak English well. Promotion presents a challenge for many Hmong growers and can greatly impede the success of their business.

Analysis

A critical examination of the limitations to marketing success for Hmong growers follows in this analysis. Language and cultural barriers as well as the necessity of market diversification are the main limitations faced by farmers. Next, structural support for Hmong growers in the marketing process is critically examined. New programmatic efforts have emerged that better address the marketing limitations faced by growers as opposed to focusing on farming techniques. Lastly, the inadequate role governmental agricultural agencies have played is revealed and the repercussions of this are analyzed.

Barriers to Successful Marketing

At the Market

One of the most challenging aspect of being a successful farmer for many small farmers is marketing. “I am a farmer because I love to farm, not because I love to sell. That part is difficult for us.” (Farmer A, personal communication). Hmong farmers face even greater marketing challenges due to language barriers and cultural differences as well as a lack of marketing experience in the United States. “White people can pick up the phone and talk to people about their marketing problems, or check out a website. Those are huge barrier to Hmong growers” (Schermann, personal communication). Every step of the marketing process from research, planning and pricing to product strategy and promotion are challenging due to language and cultural barriers Hmong growers face.

Language barriers and cultural differences affect Hmong farmers’ ability to research. The key to customer research is becoming familiar with the clientele. When one’s clientele does not necessarily speak the same language or come from a similar background, it is more difficult to understand their wants and needs as a consumer. Pricing creates an even greater

challenge for Hmong growers. The Saint Paul farmers' market offers pricing workshops to its growers to try to address the difficulties all growers have with pricing. According to the manager of the market, "The Hmong growers take it more seriously than the other growers. There is always a meeting with Hmong growers before the general meeting to address language barriers and to make sure everyone understands" (Gerten, personal communication). These difficulties have created a tension between Hmong growers and White growers¹⁴. Product strategy and promotion are radically different in Laos and the United States. "We are talking about going from a culture that you are familiar with, you are used to a market where you bring whatever you can, you sell it on a table and say 'I hope they buy this stuff'" (Vu, personal communication). In the farmers' market setting, how a farmer presents their produce, their signs and their personal relationships with customers can be equally as important, if not more so, than the produce quality itself. The difficulties Hmong farmers have faced at farmers' markets could lead one to see how diversification of markets could be very beneficial for Hmong growers.

The Necessity of Market Diversification

Farmers' markets are the exclusive markets utilized by growers in this study. In a survey published in 2003, 96% of the 54 Hmong growers surveyed used farmers' markets as a market outlet for their produce (Olson et al. 2003). A very small percentage of the farmers also utilized wholesale food markets, contracts with individual restaurants or grocery retailers and roadside stands. There are limitations associated with farmers' markets being the sole market channeled by Hmong growers. For example, someone must always be at the farmers'

¹⁴ Not all non-Hmong farmers are White, key informants in this study frequently created this dichotomy. Their language of "Hmong" and "White" is referring to non-Hmong growers, who at many farmers markets in the Twin Cities, are predominately White.

market selling. And if a farmer has a bad day, week or month at the market, they have no back up. Therefore, diversification could open up new markets and help Hmong growers become more prosperous.

Numerous options for diversification are a possibility for Hmong growers. The formation of a cooperative could be a viable option for Hmong growers in the Twin Cities (Huginin, personal communication; Vu, personal communication). In California, a cooperative of Hmong growers was founded by the organization Hmong American Community (HAC). HAC founded the Hmong-American cooperative “in order to ensure that the Hmong are able to preserve their agrarian traditions, and improve their income” (Canizaries 2003, 1). The founder of the HAC cooperative remarks, “We needed a co-op to make sure that we all get a fair price for what we grow. There are so many small farmers. If we don’t get together, we are competing with each other” (Lee in Canizaries 2003, 1-2). The Hmong-American cooperative now markets their produce under their own label. The formation of a cooperative could help Hmong growers in the Twin Cities metropolitan area enter new markets prosperously. New markets could include securing community-supported agriculture (CSA) contracts. CSA programs can be beneficial because “they take away some of the uncertainty in selling fresh produce at the farmers’ markets” (Yang in Egerstrom 2003, 1).

Cooperative marketing could also help Hmong growers break into local food networks such as restaurants and grocery stores. A particularly good network is the Heartland Food Network. “That [the Heartland Food Network] is a great program that Hmong growers need to become a part of” (Vu, personal communication). The Heartland Food Network is a network that “encourages the purchasing of local, sustainable or organic foods...and also works to increase the availability and variety of regional, sustainable or

organic foods through diverse distribution systems” (Heartland Food Network, 2007). This network is an example of an opportunity Hmong growers could capitalize on to diversify their market. The lack of knowledge of these opportunities is the main reason more Hmong producers have not taken advantage of them. It is key for organizations supporting Hmong farmers to raise awareness of these opportunities for market diversification.

Assistance in Overcoming Barriers

As discussed in the previous chapter, *Farming Practices*, programmatic support for Hmong farmers commenced in the early 1980s. Early support for Hmong farmers focused primarily on farming techniques. Due to funding issues, changes in leadership and general organizational shifting, average changes that occur within organizations over the years, early programs assisting Hmong farmers were phased out or dissolved. It was not until the late 1990s when a new emergence of organizational support for Hmong farmers occurred.

An Overview of Institutional Support in the 1990s

The University of Minnesota Extension reintroduced programs to assist Hmong farmers in the 1990s and additionally, a new program has emerged out of the Minnesota Food Association. While the early programs geared to assist Hmong farmers focused on teaching farming practices to Hmong farmers and the Extension Service still provides farming assistance, programmatic support is now geared more towards assisting farmers acquire land and develop successful marketing techniques.

The Extension Service began two programs in 1998, the Farming Incubator Program and the New Immigrant Farm Program. Both these programs were primarily composed of Hmong participants. Both these programs still focused on farming productivity. However, in

addition to this, there was an increased awareness of the need to address the issue of land acquisition. Both these programs were very focused on helping farmers build equity so they could purchase land (Idstrom 2003). For various reasons, both these programs have since been dissolved. However, their existence and focus on land acquisition demonstrates an increased awareness of the challenges faced by Hmong farmers.

The Minnesota Food Association (MFA) New Immigrant Agriculture Project is “the only program in the Twin Cities metropolitan area that works specifically in the Hmong [farming] community” (Vu, personal communication). MFA focuses predominately on land acquisition and marketing. The program demonstrates an acute awareness of the barriers faced by Hmong producers. In addition to helping them acquire land; the program works directly with growers on improving marketing strategies. Unlike the Extension programs, this program does not focus on teaching farming techniques. “Hmong growers are phenomenal growers. They know how to grow. So we focus on the business aspects” (Vu, personal communication).

A large part of the success of the MFA program is the Hmong personnel on the staff. The project employs one Hmong staff person to work with the Hmong immigrants involved in the program. “I am Hmong. I speak Hmong, my family farms. This helps the Hmong growers I assist to trust me...the program’s weakness is that I am the only Hmong person on the staff. There are too many farmers to help” (Vu, personal communication).

The program is based on the premise Hmong farmers know how to grow and thus, assistance in making farming profitable is where the focus of programmatic support should be. Market assistance includes assisting farmers in finding niche markets, assisting in the organic certification process, explaining legalities and assisting in promotion. Furthermore, the program works aggressively to help farmers secure loans for land. In fact, the program

was involved in helping the first Hmong farmer to receive an FSA loan (Vu, personal communication). The shifts in focus of Extension programs as well as the emergence of the MFA program show an increased awareness and respect for the adaptability and productivity of Hmong growers farming techniques.

Governmental Support

The United States Department of Agriculture (USDA) and the Minnesota Department of Agriculture (MDA) have been minimally involved with Hmong farmers over the years. The USDA does umbrella outreach for all new immigrants and refugees (Schermann, personal communication; Vu, personal communication). Different agencies within the USDA have funded various initiatives, which have benefited Hmong farmers. The Minnesota Food Association New Immigrant Agriculture program is one of a handful of efforts funded by the United States Department of Agriculture (USDA) in their effort to support diverse agriculture in the United States. Also, the USDA has awarded grants to researchers at the University of Minnesota to study Hmong production systems. The Minnesota Department of Agriculture has not been involved with Hmong farmers directly at all. “Hmong growers are off the radar off the Minnesota Department of Agriculture” (Schermann, personal communication).

A large reason why Hmong growers have not received more support from the USDA and the MDA is the lack of data on Hmong growers. When asked if there is data for Hmong farmers, key informants replied, “Nobody knows that data...there is a lot of inaccurate information on the number of Hmong farmers. There are a lot more than people would say” (Vu, personal communication) and “There really is not a lot of data on where

they are or how many there are like there is for other farmers” (Schermann, personal communication). Clearly, data on Hmong farmers is either inaccurate or non-existent.

Both the governmental agricultural agencies collecting data on farmers and Hmong growers play a role in contributing to the general lack of data on Hmong growers. As Schermann comments, “Pretty much you are off the radar if you are not getting a loan or growing a commodity crop in Minnesota” (personal communication). The Hmong coordinator at the MFA program explains, “I think the MDA expects us to reach out and bridge that gap [the data gap]. But we don’t have the time. We are understaffed and underfunded” (Vu, personal communication). Small-scale, minority farmers have frequently identified the lack of knowledge of their practices as resulting from inadequate outreach on the part of governmental agricultural agencies (Green 2001).

While the USDA and MDA have not been actively trying to collect data on Hmong producers, even if there was a concerted effort, the agencies may have been unsuccessful due to the unwillingness of Hmong growers to volunteer information.

It has a lot to do with the Hmong community and their desire not to register as farmers for personal reasons. You have to understand where we came from, Laos, which is a Communist country. The Hmong are scared of the government meddling in their finances. There is a lack of trust in the government. And it is not necessarily due solely to their experiences in the United States. But it is what they grew up with. It is hard to break those barriers.
(Vu, personal communication)

Some Hmong farmers fear benefits they are receiving from the government will be taken away if they disclose information about their farming productions. Other farmers do not want the government involved because of past experiences with programmatic assistance. Early programs assisting growers, motivated heavily by desire to help them assimilate and theory and belief in the superiority of western farming systems, focused on promoting western agricultural techniques. There was little attention paid to the barriers the Hmong

growers perceived as their biggest challenges, land acquisition and marketing techniques.

There is the tendency for federal and state government programs developed to assist farmers to do so in a highly problematic fashion. Most governmental agricultural programs have been designed to provide the greatest benefit to farmers with the highest level of production rather than those with the greatest level of need (Jones 1994). Additionally, support for small-scale producers “continues to promote industrialization, capitalization and corporate control of the agri-food systems” (Green 2001, 11). Due to these reasons, Hmong producers will continue to under-participate in government-related programs.

This lack of data on Hmong farmers and under-participation of Hmong producers in government programs has consequences. “Anyway you look at it, there is a disconnect between the Hmong community and funding. It puts them at a huge disadvantage. They are not going to get that funding” (Vu, personal communication). Without securing the funding governmental agricultural agencies provide, Hmong producers will continue to have difficulties securing loans to buy their own farms. The Minnesota Food Association New Immigrant Agricultural Project, the only program that assists the Hmong to acquire land and addressing marketing barriers, will continue to struggle due to being understaffed and underfunded. Thus, despite their incredible success, Hmong farming enterprises face challenges that will threaten their sustainability, as I will discuss in the subsequent chapter.

Conclusion

Hmong growers in the Twin Cities metropolitan region are changing the agricultural landscape of this region. Their desire to reconnect with their agrarian roots has brought them to farm as a means of achieving economic self-sufficiency. Institutional support for Hmong growers fluctuated over the years. From the initial desire to support Hmong refugees in the assimilation process, through support of agriculture, emerged select programs to assist Hmong growers. Early programmatic efforts promoted agricultural assimilation. They provided assistance to Hmong farmers in a highly problematic fashion, by promoting western agricultural practices.

Hmong growers have been incredibly successful in their farming endeavors. They have resisted complete agricultural assimilation. And in turn, they have developed a hybrid approach to farming, drawing heavily from traditional agricultural practices, which is both more economically and ecologically rational than the western practices they were encouraged to employ, given their parameters. Hmong growers have been able to do something they love that reconnects them to their past while also securing their future by helping them become economically self-sufficient.

Despite the phenomenal success of Hmong growers, numerous changes are occurring that present great challenges and threaten the sustainability of Hmong agricultural enterprises. The older generations of Hmong growers, who are the primary group of farmers, are reaching an age where they can no longer farm. Many younger Hmong do not want to farm, “I see how hard my parents work in the fields. From early in the morning until late at night. I don’t want to do that” (Anonymous informant, personal communication, October 16 2006). “I farm so my children don’t have to. They will get a good education and

be a doctor or lawyer” (Farmer C personal communication, November 10 2006). There is a desire for the next generation of Hmong to achieve success in other enterprises.

There are members of the second generation of Hmong refugees who want to farm. The younger generation of Hmong who do desire to farm face great barriers to farming success. As land prices in the peri-urban zone are rising and being developed, it is becoming less affordable and more difficult for Hmong growers to secure land to farm. If Hmong growers are not able to purchase land, people from the next generation will have nowhere to farm. Farming is an important part of the Hmong heritage. If the next generations are not able to access land to farm, they could unwillingly lose this important part of their history.

In recent years, programs have emerged that are building on the success of Hmong growers while simultaneously addressing the major limitations they face. The success these programs have experienced is somewhat limited because their efforts are hampered by a lack of funding. In order for Hmong farming enterprises to be successful, a variety of policies are recommended.

Policy Recommendations

There should be increased support for Hmong farmers in the Twin Cities. It is important to support this group of refugees as they transition to life in America while trying to maintain connections to their past. An equally important reason to support Hmong farmers is because their farming systems are ecologically sustainable and economically rational. The ecological impacts and economic rationality of industrial agricultural are increasingly being uncovered as questionable. Thus, Hmong farming systems deserve support and attention.

A series of actions must be taken in order to address the main challenges facing Hmong farmers in the Twin Cities metropolitan region. Firstly, the absence of data on Hmong farmers must be addressed. Comprehensive data collection would demonstrate that there are a growing number of Hmong farmers in the area. If the emergence of Hmong farmers was perceived as a growing trend, more support from government agricultural agencies in the form of funding could be secured. United States Department of Agriculture and Minnesota Department of Agriculture funding is necessary to help farmers secure loans to buy farmland and diversify their markets. Direct assistance from government agricultural programs is not recommended because of the tendency of these programs to promote western agricultural practices and the general distrust Hmong growers have in governmental agencies.

In lieu of direct support, both the USDA and the MDA should channel funding towards small programs such as the Minnesota Food Association New Immigrant Agriculture Project. In order to address the language and cultural barriers the Hmong face in dealing with organizations, these smaller programs must place priority on employing Hmong personnel to assist Hmong growers. The direction of these programs must be decided not only by personnel but also by Hmong growers themselves, who are intimately aware of the barriers to their success.

While farming is a secondary source of income for most Hmong growers, there is a desire among many growers to sustain their family's livelihood through farming. By focusing on the most urgent barriers to farming success, programs could help farmers fulfill this dream. Two vital programmatic efforts, which must be addressed, are helping Hmong farmers develop new marketing strategies and helping Hmong acquire farmland. Market diversification will enable farmers to be more profitable and possibly sustain themselves

year-round by farming. In order for Hmong growers to farm in a sustainable manner, they must own farmland. “When I think about the future for Hmong growers, I wonder what will happen. If you don’t own your land, it’s a big barrier to the next generation. What land will they farm?” (Huginin, personal communication). Continued programmatic support could enable Hmong growers to secure Farm Service Agency (FSA) loans to fulfill this dream.

The Broader Context

This study of Hmong growers informs on-going conversations in the literature about immigration, assimilation, cultural ecology and political ecology. Assimilation theory remains the dominant conceptualization of the adjustment of immigrants and underpins numerous governmental policies concerning the adaptation of immigrants in the United States. This study demonstrates how the theory of assimilation continues to influence organizations that work with immigrants today. In a farming context, the theory of assimilation manifests itself in a unique way. The desire to help Hmong refugees assimilate led to the encouragement of farming as a way of attaining economic self-sufficiency. The desire to help the Hmong achieve agricultural assimilation dominated early programmatic efforts. It drove programs to center on promoting the use of western farming practices to Hmong farmers who have traditionally practiced swidden agriculture in the highlands of Laos. The experience of Hmong growers in the Twin Cities metropolitan area proves that rejecting complete agricultural assimilation was a more successful strategy.

While never used to study the intersection of two radically different agricultural systems in the First World context, the political ecology lens has proved very useful for the study of challenging the superiority of scientific knowledge over traditional knowledge in the Third World. Additionally, political ecologists have challenged the claims that modern

agriculture is more productive than small-scale, traditional agriculture. This study has contributed to the burgeoning literature on First World political ecology.

This case study is unique in that it allows for the examination of what occurs when traditional swidden agriculturalists from the highlands of Laos resettle in the heart of an industrial, modern agricultural landscape. Despite programmatic efforts which taught and encouraged the Hmong to adopt western farming techniques, Hmong growers decided to employ a hybrid method in which they utilize many traditional techniques. Their success in employing numerous traditional techniques demonstrates the adaptability of their traditional agricultural practices. These findings suggest that when these two systems intersect, traditional agriculture can be superior to modern agriculture because it is more economically profitable and ecologically sound. By making their imprint on a landscape dominated by large-scale, industrial agriculture, Hmong growers have affirmed the viability of small-scale agricultural systems.

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Appendix A

Verbal Consent Agreement

“My name is Laura Kerr. I am a student at Macalester College working on a paper pertaining to Hmong farms in the Twin Cities Metropolitan area. May I please ask you a series of questions? This is by no means obligatory. You may choose not to participate at any time. Is it ok if I record your answers? Your anonymity will be upheld in my research and any information disclosed that you would like to be confidential will be. Thank you.”

Informed Consent Informational Paper

Thank you so much for answering my questions. These answers will be very informative and valuable to me in my study of Hmong farms in the metropolitan area of the Twin Cities. In my study, I am examining the emergence of Hmong farms around the Twin Cities metropolitan area and assessing their potential success. In order to do this, I am asking three primary questions

- (1) Why has this agricultural trend emerged among Hmong immigrants in the Twin Cities?
- (2) What are the main barriers to farming success for Hmong growers?
- (3) How are organizations helping Hmong farmers address these barriers?
- (4) Can farming be a sustainable livelihood economically and ecologically for Hmong immigrants?

There are inherent risks involved in this study. The risks associated with this study primarily have to do with the disclosure of private information particularly in regards to monetary earnings etc. or farming techniques. The risks associated with disclosing monetary earnings are that many Hmong farmers do not report earnings from their farms. Some Hmong growers are receiving welfare from the state. However if these were reported, this could place the farmers at risk for getting their public assistance taken away. In addition, there are risks associated with disclosing information about farmer's techniques. All farmers have very particular ways of farming. Many farmers have tricks or unique techniques which enable them to produce better crops. It could be detrimental to a farmer if their special techniques were disclosed to the public.

In this study, in order to reduce risks associated with the study, I will completely obtain your anonymity, as I have agreed to today. In addition, I will keep any confidential any information you would like kept private. If after this interview, you have any additional questions, requests or information, you can contact me or my advisor, Bill Moseley.

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Appendix B

Sampling of Questions for Interviews

Interview Topics and Questions for Farmers

Background Information

- Where are you from originally?
- When did you immigrate to the United States?
- What was your life like in...?
- What is your family structure?

Livelihood Questions

- When you first immigrated to the US, what did you do for income?
- What factors played a role in your decision to farm for economic profit?
- Is farming your primary source of economic income? If so, is this reliable?
- What other sources of income do you rely on?

Farming Specific Questions

- What previous experience have you had farming?
- Did you farm in...?
- How many years have you been farming in the US?
- How is farming in the US different than farming in...?
- What barriers have you faced that have hindered you from becoming a successful farmer? (Cultural, language barriers, little education about credit programs etc.)
- Why did you begin to farm here?
- Where is the plot of land you farm?
- How many acres of land do you farm on average each year?
- Do you rent this land or own this land?
- How did you find this piece of property?
- What types of farming methods do you use?
- Where did your seeds come from?
- What types of farm equipment do you use for plowing, cultivating and seedbed preparation?
- What inputs do you use in your fields to control weeds and pests?
- What type of crops do you cultivate?
- Why did you choose to plant these particular crops??
- On average, what have been your farm production costs per year?
- What have been your average farm product sales per year?
- Have you received any help (financial or informational) from friends, other farmers, the government etc. in your time farming in the United States?

- Where do you sell your crops?
- Of these places, which are most lucrative financially?
- To whom do you sell your crops?

- What have been the largest barriers to success as a farmer?
- Do you believe that farming is a sustainable livelihood?

Interview Topics and Questions for Key Informants

Program Specific Questions

- Please discuss the work you have done with Hmong growers.

General Questions on Hmong Growers in Minnesota

- Why do you believe Hmong refugees have chosen to farm as a source of income?
 - Is this generally a primary or secondary source of income?
- Who do you think is deciding to farm? (lower/ higher income; recent/ older refugees; older/ younger generations)
- Approximately how many Hmong growers (persons who sell their produce for profit) do you think are in Minnesota?
 - Does the MDA have any data specifically pertaining to Hmong farmers?
- What are the major barriers to agricultural success within the Hmong farming community?
 - What challenges do you see Hmong growers facing (individually)?
 - Are these unique or similar to the challenges you see other growers facing?
- Do you believe there are conflicts between the Hmong farming community and the larger farming community? If so, what are they?
- How would you characterize Hmong farms?
- Can you explain the techniques you saw being used on Hmong farms?
 - Any mechanized equipment? If so, where did the equipment come from?
 - Any inputs such as pesticides and fertilizers?
 - What type of labor was employed? Generally, who was in charge of the farms?
- What are the trends pertaining to land acquisition?
 - Are lands rented or purchased?
 - Has this changed over the years?
- Where did you see the largest concentrations of Hmong growers?
- Why do you believe Hmong growers choose to rent/ buy land in these areas?

Contacts

- Are there any growers who you have worked with who I could contact?
- Are there other persons with extensive knowledge about Hmong growers in Minnesota who I should contact?

Appendix C

Extensive List of All Crops Grown by Farmers in Study

Basil
Beets
Bitter Melon
Bitter Nightshade
Broccoli
Butterhead Lettuce
Cabbage
Carrots
Cilantro
Corn
Cucumbers
Eggplant
Garlic
Green Beans
Green Onion
Flowers (many varieties)
Leeks
Lemon Grass
Lettuce
Long Bean
Mustard
Onions
Peas
Peppers
Pickles
Potatoes
Radish
Raspberries
Spinach
Squash
Tomato

