

# **The Hmong Farmers of Providence, Rhode Island: Roles of Agricultural Adaptation and Persistence in Hmong American Life**



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## **ABSTRACT**

The aftermath of the Vietnam War forced many of the Hmong people of the Laotian highlands to flee their homes and migrate to the United States, a jarring migration that took them from a rural agrarian lifestyle to an urban industrial one. Still, many Hmong communities across the United States continue to practice their traditional agricultural knowledge through work on backyard gardens, community gardens, and farms, growing myriad traditional crops and providing healthy, affordable, culturally preferred produce to their families. This thesis details work with the Hmong farming community in Providence, Rhode Island. It presents findings from research exploring the roles and meanings of agricultural persistence and adaptation in this community, including the specific growing techniques employed by Hmong growers in Providence, the adaptive strategies they have employed, and the challenges they face in continuing to practice their traditional knowledge in this context; Hmong perceptions of farming as a livelihood in the United States; and reactions to the American agri-food system and dietary patterns. Needs of the Hmong farming community for their continued and improved success was also an area of exploration, in hopes that groups such as Southside Community Land Trust and the Hmong United Association of Rhode Island can work together to bolster the diverse farming community of Providence, Rhode Island, with the Hmong situated as important contributors of rich agricultural knowledge in this diverse urban farming hub.

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## **II. INTRODUCTION**

In a vibrant community garden on Glenham Street in the Southside neighborhood of Providence, Chee grows enough produce to feed her eight children in a 10'x 10' plot. At a community farm in Scituate, Kia tends a variety of crops, keeping a patient eye on her soybeans through the first week of November when they are finally dry and ready to be harvested and used for homemade tofu, which she shares with family and friends after a labor-intensive process. At the Broad Street farmer's market in Providence, a group of women called the Southside Community Growers collectively sell mustard greens, bitter melon, long beans, chili peppers and other produce that they've grown in garden plots all over the Southside and West End of Providence. In Cranston, on land leased from the Urban Edge Farm, Chang and George run a successful farm business, producing a variety of organically grown crops for five farmer's markets, a CSA, and Farm Fresh RI's Market Mobile program. On an adjacent piece of land in Cranston, George's brother Charlie also tends a myriad of crops that he takes to a handful of farmers markets and shares with family and friends, a business that is run with the careful oversight of Charlie's three-year old grandson who already loves feeding the chickens and cutting down sugarcane stalks. These growers, along with many others like them, create a rich mosaic of traditional Hmong agricultural practice in this New England city and the surrounding peri-urban area, growing and cooking many of the same crops that they grew up with in their homeland of Laos<sup>1</sup>. A traditionally migratory agrarian culture within Southeast Asia, the Hmong were forced to make a long, dangerous, and life-altering migration to the United States when their involvement with the United States during the Secret War in Laos necessitated their flight from their highland homes in the late 1970s and early 1980s.

The persistence of agricultural practice has been an invaluable form of adaptation to this new socio-cultural and environmental context for the Hmong, as continued farming helps to maintain cultural identity and practice, an important mechanism for adjusting to life in a new and starkly different country (Corlett 1999, 2003). Kathryn De Master's (2003) work with the Hmong in Madison, Wisconsin describes the agrarian tradition of the Hmong as historically informed and fine-tuned, adaptive, efficient, embedded in cultural and spiritual beliefs, based on a diverse diet, and socially stabilizing. With over 100 Hmong families residing in the Providence area, and many of those actively involved in community gardens, opportunity was ripe for me to explore what continued agricultural practice means for the Hmong in adapting to this new environmental and sociocultural landscape, as well as how the rich, multidimensional knowledge held by the Hmong might be fostered and valued in the United States. This is especially relevant in Providence as communities and organizers seek ways to encourage the growth of a more resilient agriculture. In fostering Hmong agricultural practice, which developed over generations of families being connected to the land and sharing knowledge within communities and down through generations, how might the larger Providence community grow in terms of a resilient local food culture? The importance of "indigenous," "traditional," or "local" knowledge in forming resilient and sustainable agricultural and ecological systems is a question that has been raised by many scholars

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<sup>1</sup> See Appendix for "Meet the Farmers" informational pages.

(Altieri 1987, 2004; Flora 1992; Berkes, Colding and Folke 2000). Because they have “stood the test of time,” traditional agro-ecosystems “may represent signposts along the road to an ecological agriculture” (Perfecto, Vandermeer and Wright 2009: 63).

Using community-engaged qualitative research methods of participant observation and oral history interviews, I explored the following research questions:

*What specific growing techniques characterize Hmong farming, and how have growers adapted their generations-old knowledge in order to transplant the techniques and crops of their agrarian heritage to the Providence setting? What does this adaptation mean for Hmong growers in the context of resettlement?*

*How do the Hmong in Providence perceive farming as a livelihood in the United States, and how have Hmong views of work in general shifted in the context of a non-agrarian society?*

*How do the Hmong in Providence view the United States’ food and farming system, and how are Hmong traditions related to food and nutrition reshaped or mobilized in response to this different context?*

*How might the Hmong community in Providence be better supported in the persistence of their farming tradition, and what does this mean for the larger urban farming community in Providence?*

My findings demonstrate that Hmong agricultural practice in Providence is a diverse, complex system of constantly-evolving knowledge that embodies many agroecological principles and has undergone great adaptations in order to persist in this setting, still growing many of the traditional tropical species grown by generations of Hmong farmers in Southeast Asia. The process of adaptation is made possible by the Hmong tradition of knowledge exchange, which occurs in this context both within the Hmong community and, increasingly, with various ethnic groups involved in the Providence farming community. In addition, my findings reveal that perceptions of farming as a livelihood in this Hmong community vary both between and among generations. American views of working life instilled during the resettlement process have encouraged many “traditional” parents to value more modern occupations as appropriate adaptations to this society, still maintaining Hmong cultural values of hard work and self sufficiency. However, other interviewees see the work ethic provided by farming as an important practice even in the context of modern working life, and young people working at the farmers market provide nuanced views on what farming practice means for their generation. With regards to the US food and farming system, my findings include that there is great concern in the Providence Hmong community about the “unnatural” and chemical-driven processes of vegetable and meat production in the US. Additionally, I observed among interviewees a consequential shift back to traditional Hmong diets in order to counter the perceived and experienced negative health outcomes of the American diet and long-term risks of consumption of foods produced using chemicals, antibiotics, and growth hormones (Horrigan, Lawrence and Walker 200; Gurian-Sherman 2008).

These findings represent the multifaceted role of farming practice in Hmong American life, and illustrate vividly the adaptive capabilities possible when communities have the space to practice their traditions and respond to their environment based on their own knowledge systems. My findings call into question authoritative models of *refugee resettlement* and interventionist approaches to *diet and nutrition*. This exploration of the Hmong farming community in Providence is also an important story in understanding the importance of encouraging local control over food production, or *food sovereignty*, and also provides an example of the potential in looking to traditional knowledge systems, like that of the Hmong, for guidance in *agroecology* research and practice.

### A. Contributions

This research seeks first and foremost to contribute to the Hmong community and to the larger urban farming community in Providence by exploring how Hmong growers might be better supported, and how efforts to grow local food sustainably<sup>2</sup> with limited space and in a challenging environment might be explored through the exchange of knowledge, valuing multiple epistemologies. Community organizations such as Southside Community Land Trust (SCLT) may benefit from this project's investigation of the greatest areas of need identified by the Hmong and how they conceptualize the ideal form of support for their community. This project also aims to open the door to greater knowledge sharing and community growth in the urban farming community. I also aim to support the Hmong United Association of Rhode Island (HUARI) through this work by communicating some of the challenges and goals cited by their President, Phillip Yang, in hopes that community collaborations will be encouraged through the findings and suggestions presented here that will further the work of this organization.

I also aim to contribute to multiple, interdisciplinary streams of academic inquiry through the presentation of these findings. This research reveals that the Hmong community in Providence demonstrates resilient adaptation of cultural knowledge and skills throughout their resettlement in spite of an authoritative, acculturation-focused resettlement process; community-driven responses to observed negative health outcomes of Americanized dietary patterns and the industrial agri-food system; local control reminiscent of aspects of food sovereignty; and farming practices largely aligned with agroecological principles. The findings presented provide rich contributions to each of these fields of study; background on each of these areas of research will be provided in the literature review.

### B. Outline

This synthesis of my work with the Hmong farming community in Providence begins with a discussion of the qualitative methodology I chose to employ and the reasoning behind this research design. I will then provide a chapter on Hmong historical and cultural background, outlining their history in Southeast Asia, their migration to the United States, and the establishment of their community in greater Providence, Rhode Island. Next, I will present a review of foundational and contemporary literature for the interdisciplinary themes explored in this paper, including a discussion of the refugee resettlement models used in the US and how these models have affected the Hmong; US

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<sup>2</sup> Food system sustainability is embodied by a food sector that is economically sustainable, environmentally sustainable, and just (Kloppenborg et al. 2000).

approaches to nutrition education and promotion and how this relates to the refugee community and their knowledge systems; the concept of food sovereignty, its strengths and relevance to the Hmong community, and how this international movement is being embodied in the US context; and finally the ideas behind agroecology, and the place of traditional knowledge in creating a more ecologically and socially resilient agriculture.

I will begin a discussion of the findings of this research with a detailed review of the Hmong farming practices that I observed in the Providence area, including techniques, species grown, challenges, and adaptations. Next I will discuss Hmong perceptions of farming as a livelihood in the US, both between and among generations, and the nuanced implications of these shifts on continued agricultural practice in the US. Third I will delve into Hmong reactions to food and farming in the US, and how these reactions influence choices related to diet and health, and therefore food and farming practice in Providence. The final substantive chapter will outline my suggestions for further support of the Hmong farming community that have emerged from my conversations with growers and community members. These will include both practical suggestions and more a theoretical proposal regarding a more equitable knowledge and resource sharing approach to community support. A more equitable approach should first take into account Hmong cultural structure and the kind of support that would be most likely to be accepted by the community, and also should recognize and empower the rich farming knowledge held by this community. The Hmong have needs with regards to farming opportunities and specific areas of adaptation, but they also have expertise that could position them as knowledge-sharers and contributors to the urban farming community.

### C. Methods<sup>3</sup>

This ethnographic research is rooted in methods of participatory observation, oral history interviews with Hmong farmers in the greater Providence, Rhode Island area, and expert informant interviews with those who are leaders in the community, allowing for detailed triangulation of my data. Participant observation took place through weekly visits to community gardens, backyard gardens, and farms where I observed and photographed the progress of crops over time, participated in community workdays, observed growers, and assisted individuals with their plots from July through October. Employing the participant observation method allowed me to have more casual conversations with people than what emerges in an interview setting, to observe their techniques firsthand, and to build relationships and trust in the community. Oral history interviews<sup>4</sup> were conducted with twelve individuals; this style of interview allowed for an open dialogue about the family's history, what brought them to Providence, and their experiences with food and agriculture both in Laos and in the US. Oral history also provides freedom, autonomy, and ideally a sense of ease to interviewees, as they can decide which stories to share and exercise control over the course of the conversation. I see the oral history method as a more ethical approach to interviewing refugees than a journalistic style, since these individuals have endured difficult and even traumatic experiences that they may not feel comfortable sharing with a stranger and an academic;

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<sup>3</sup> An Extended Methods section can be found in the Appendix.

<sup>4</sup> Sample interview questions can be found in the Appendix under the Extended Methods section.

therefore, the open-ended nature of oral history interviews avoids creating the discomfort that may be caused by more pointed questions.

Oral history interviews allowed me to deepen my exploration beyond routine interactions at gardens and farms, to get a glimpse of the personal histories and subjective experiences of twelve members of the Hmong community. Oral history “allows for the description of feelings, emotion, memory, perception and identity, throughout a life course” and facilitates “connections between social groups and roles, giving insights into the lives of many” (Hayes 2009, p. 221). Additionally, oral history is “often credited with the potential of opening up new areas of inquiry or exposing the voices of those marginalized or excluded from professional or organizational archives” (Haynes 2009, p. 221). Michael Burawoy identifies oral history as a method of the ‘organic sociologist,’ one who works “in close connection with a visible, thick, active, local and often counterpublic”—such as the thriving Hmong farming community in Providence (Burawoy 2005, p. 7). In her book of oral histories illustrating the experiences of immigrant gardeners, *The Earth Knows My Name*, Patricia Klindienst pointed out that our tendency when regarding immigrants is to see them as “a transplanted people,” a garden metaphor that renders immigrants to be plants instead of people. Klindienst mused, “what if I reversed this metaphor? What would become visible if I focused on the immigrant as a gardener—a person who shapes the world rather than simply being shaped by it” (2006, p. XXI)? This was a lens that I found helpful in my collection of oral histories, focusing on the agency of the Hmong farming community by inquiring about the knowledge they brought with them from Laos or learned from their parents, extended family and community members.

Michael Burawoy (1998) describes ethnographic research as a handicap, as the ground beneath the scholar is “always shaking” so that “we need a crutch,” in the form a methodological frame to keep one upright. He calls upon a reflexive approach to research—an approach that is characterized by the participant observation method in which “we keep ourselves steady by rooting ourselves in theory that guides our dialogue with participants” (p. 5). He points to participant observation as a key method in reflexive research, which serves “to connect the present to the past in anticipation of the future” (p. 5). This is precisely what I aimed to do through this research—to connect with the Hmong farming community in Providence by learning about their agricultural histories and how their traditional knowledge systems are being kept alive, in anticipation of a move towards more epistemologically inclusive sustainable agriculture systems. Participating in gardens and farms alongside Hmong growers was a unique and valuable experience in this research, allowing me to observe first-hand the specific methods used, helping me to understand the routine and rhythm of Hmong growers in their daily work. This method provided a more informal subject-researcher relationship, allowing time to get to know each other and converse outside the formality and time constraints of an interview. In this way, I was able to gain a more organic understanding of Hmong life in Providence, as well as Hmong culture. I also had the opportunity through my participant observation to glean many helpful tips on gardening, cooking and herbal medicine.

The findings presented here are the outcomes of my conversations in backyards and at garden tables, my photographs, my hours spent harvesting in the field, and my time experiencing the privilege of building relationships with members of the Hmong community who welcomed me warmly and openly into their lives. The utmost priority of

this project is to provide the clearest representation of their voices and experiences, which they have been so generous to share.

### **III. THE HMONG: HISTORICAL AND CULTURAL CONTEXT**

On a hot July afternoon at the Hmong Community Farm in Scituate, Phillip Yang, an influential mentor in this project, points out a curious man-made contraption at the base of a corn stalk. “It’s a snare,” he explains, “my dad built it—it’s for the raccoons.” We stand and admire his father’s handiwork—a slender tree branch whittled and shaped with a knife and tightly suspended with twine, poised and ready to trap the pesky animals that have been stealing young corn, eggplant, and other produce from the fields at night. Phillip explains that his father used the same snare in the jungle to catch animals for meat when they were escaping Laos for refuge in Thailand. In the wild, without the bait of ripening produce, the snare didn’t always yield results and their diet often consisted of wild plants and insects. Phillip, only eleven years old at the time, recalls some of this and states matter-of-factly, “We had to survive.” The use of this snare to mitigate pest issues at the Hmong Community Farm is one of the many examples of adaptations that have been drawn from the Hmong’s experiences in Laos and put to use in the United States; a practical, low-cost skill that has aided their survival and sustenance in a variety of contexts.

The Hmong migrated to the United States in large numbers as refugees in the late 1970s and early 80s as a result of the aftermath of their involvement in the Secret War in Laos during the war in Vietnam, a forced migration that marked a huge shift in Hmong society, creating a diaspora that spans the globe (Chan 1994). From the early 1960s to 1975 about one third of the Hmong were recruited to assist the US Central Intelligence Agency (CIA) during the Secret War in Laos, an under-cover effort to support the Royal Lao government in opposition to the Pathet Lao and the Communist North Vietnamese (Yang 2001; Ng from Ling 2008). The war left 400,000 Hmong killed, thousands injured or disabled, and countless missing (Ling 2008). When the country fell to communist forces in 1975, the Pathet Lao attacked the Hmong who were then forced to flee their homes in Laos to avoid death or being sent to Communist reeducation camps. Most attempted to escape through the jungles—a dangerous journey that often meant capture, execution, or drowning in an attempt to cross the Mekong River without the skills to swim—to seek safety at refugee camps in Thailand (Fadiman 1997). First-generation Hmong immigrants and their children (including Phillip Yang) hold harrowing tales of fleeing for their lives to an unknown future (personal communication with Phillip Yang).

The Hmong were not the only people forced to take flight at this time—since 1975 roughly 150,000 Hmong have fled Laos and over one million Southeast Asian refugees and immigrants have arrived in the United States from Vietnam, Cambodia and Laos (Chan 1994; Ling 2008). With little knowledge of Southeast Asian culture in general, the American public did not greet this diverse influx of refugees with a great deal of understanding or warmth (Ng from Ling 2008). This review aims to provide deeper insight into the background, cultural traditions (especially agricultural) and American experience of the Hmong, and generally provide context for the discussion of the experience and adaptive processes of Hmong farmers in Providence, Rhode Island.

#### **A. History of the Hmong in East Asia**

The Hmong people’s place of origin is a topic of contention, but what is certain is that ancestors of the Hmong inhabited the river plans of north-central China a few hundred generations ago, and the Hmong have gradually migrated through southern

China and finally into Southeast Asia, primarily to Laos, Vietnam and Thailand (Fadiman 1997). The southward migration of the Hmong is mostly due to the tension between Hmong and Chinese cultures; the animosity between these groups arose from the Hmong's desire to remain a separate society, viewing the Chinese as oppressive; the Chinese were offended by the fact that the Hmong expressed no interest in adopting their "civilized" customs (Fadiman 1997). The Hmong were eventually pushed from the fertile lowlands of southern China to the less hospitable northern highlands of Laos, Thailand, Vietnam and Burma in the late nineteenth century (Donnelley 1994; Chan 1994). Because the Hmong of Laos were the group involved in US military affairs, almost all Hmong in the US (and all the Hmong interviewed in this research) come from Laos, so the Laotian Hmong population will be the focus of this paper.

Throughout their history the Hmong have nurtured a rich agrarian tradition that they continued to practice through their Southeast Asian migrations by practicing "swidden" or slash-and-burn agriculture—using one piece of farmland for five to ten years, and then moving to a new place in order to stay on the richest soils (Tapp 1989; Mortland and Ledgerwood 1987; Corlett 1999; Lee 2005). In this way, agricultural adaptation has been a necessity of Hmong life for much of their existence, laying a rich foundation of farming knowledge that has enabled the Hmong in Providence, Rhode Island to adapt their practice to this context as well.

### 1. Traditional Hmong Agriculture

In Laos, the major crops grown by the Hmong included corn, dry upland rice, soybeans and, for some, the opium poppy (an important cash crop to be discussed later in this chapter). Growing the upland variety of rice was an adaptation that allowed the Hmong to have rice in their highland region, where traditional rice cultivation practiced in the lowlands involving flooded paddies was not possible. Other crops like pumpkin, cucumber, beans, eggplant, hot pepper, bitter melon, mustard greens, bok choy, and countless medicinal herbs were grown as well, often interplanted with major crops (Tapp 1986, 1989; Donnelley 1994; Lee 2005). Animal husbandry was also a large part of their traditional agricultural practice, including chickens and pigs for meat and horses for packing (Tapp 1989). As an isolated group in the Laotian highlands, the swiddening techniques used by the Hmong were not met with territorial conflict by any other groups, and this isolation meant that the Hmong were almost entirely self-sufficient in subsistence production, although more contact with modernized societies developed over time and meant increased trading for valued items like salt, utensils, iron for making tools, and kerosene lamps (Chan 1994; Lee 2005).

In addition to selecting subsistence crop varieties and agricultural techniques that helped them survive in their highland home, cultivation of the opium poppy is another case that highlights the adaptive capabilities of the Hmong. The opium poppy was a valuable cash crop strategically used by the Hmong to acquire goods they could not produce themselves; they learned how to cultivate the crop in China and continued to grow it in Laos (Chan 1994). Opium was in high demand during French colonial rule and, geographically situated at the elevation where it could be produced most efficiently, the Hmong capitalized on this demand by becoming the best producers of opium in the region during colonial times; much of the capital gained from the opium trade went towards paying the high taxes demanded by the colonial government (Corlett 1999; Chan 1994). Women were in charge of the tedious cultivation of the opium poppy, which was

often traded for silver and used to make the intricate silver jewelry for which Hmong women are known (Donnelly 1994). As the opium trade increased, much illicit trade of opium occurred in the region, with the Hmong used “as pawns” in the “international power politics” of the opium trade, as prices were set and controlled by the colonial government which received most of the benefit for the tedious manual labor performed by the Hmong (Chang 1994). Within Hmong society, however, a tradition of crop diversity and subsistence agriculture was not uprooted by the complex politics of the opium trade, as agriculture is deeply embedded in Hmong culture, family life and spirituality.

#### *Hmong Agriculture and its Embeddedness in Culture, Family, and Spirituality*

The embeddedness of Hmong agriculture in family, community life, and spirituality is evident both in literature reviewed and in my own observations with gardeners and in the homes of my interviewees. As Gary Yia Lee (2005) noted, “agriculture is closely interrelated with other aspects of Hmong society.” Most visibly, agriculture is embedded in family life, as all members of the household act “both as producers and consumers of agricultural goods” (Lee 2005). Farming in Laos was largely communal—families and neighbors assisted each other and provided for each other’s needs. Farming knowledge was gained from an early age so that “everybody already knew how to farm” and “everybody worked together every day” (Donnelly 1994). Informants in this project shared similar stories; sitting on a shaded picnic bench in the Glenham Street community garden, Kia Yang recalled:

When I was little child I see how my mother do, my father did, so I learned from that. After I got married my mother and father passed away then I not know really much but I saw what they doing, I saw how my mother make the tofu, and I remember in my mind so I learned from her and I do exactly what she did.  
(Interview with Kia Yang)

Knowledge of farming and food preparation was passed down from generation to generation, with young people starting to work in the fields around the age of five, learning by watching their parents, grandparents, aunts, uncles and siblings (personal communication with Kia Yang). This type of farming practice created a cultural preference for large families, aiming to provide a solid workforce for the farm (Yang 2012). Each year families would grow one large crop of corn, rice, and soybeans, but other vegetables and herbs could be cultivated throughout the year (personal communication, Kia Yang and Phillip Yang). The land was worked by hand and with a few simple farming tools, requiring only the use of human labor (Lee, 2005). Through this research, the importance of family and community in farming practice was evident and my observations supported these insights provided by various literature. Multiple generations were observed working together in the gardens and at farmer’s markets, with many hands being needed for the hard manual labor of farming without machinery, especially at the relatively large Hmong Community Farm. Several interviewees voiced the challenge of continuing this practice without much assistance from the young generation, with the void created by the exodus of youth from the farming lifestyle marking a huge shift in Hmong life from Laos to America. These intergenerational

tensions will be discussed in a later chapter on farming as a livelihood in the United States.

In Laos, leadership in village life was based on age, seniority and experience, with a patriarchal structure, and overall society was organized through clans that each appointed elders (Ng in Ling 2008). Clan structure can still be observed in the US, as the Hmong United Association of RI appoints as its leadership an elder from each clan; the President, Phillip Yang, hails from the largest clan, the Yang clan. The roles of clan elders have shifted in the US, however; in Laos they were mainly in charge of determining how land was used and when clan members should move to new localities, and in the US there is very little land that the Hmong have control over as a community, and this land is stationary rather than in migratory flux (Chan 1994). Still, decisions made about land are made communally by the clan leaders and by family members—this will be discussed further in a later chapter on Hmong farming practices.

In addition to being embedded in family life, Hmong agriculture “is supported by the religious system which sanctions and gives value to many of the agricultural activities” (Lee 2005). Phillip Yang explained to me, “It’s not just the modern way that we do farming, it’s the spiritual way that can help you do the farming too...in Mother Nature that will provide you rain, sun...that’s how your farm will grow too” (personal communication). He also explained that spiritual assistance is often called upon at the beginning of planting, and the spirits are thanked for the harvest (personal communication with Phillip Yang; Lee 2005). Hmong traditional medicine, too, works in deep connection with the spirit world and with “Mother Nature.”

## 2. Hmong Religion and Traditional Medicine

Traditionally the Hmong follow an animistic religion; animism is defined as “the belief that all life is produced by a spiritual force, or that all things in nature have souls” (Thao from Ying 2008, p. 39). The elements of animism vary but typically include belief in supernatural power, ancestor worship, spirit worship, and shamanism (Thao from Ying 2008). Healing through shamans is a central part of Hmong culture; shamans hold a highly respected position in Hmong society as healers of “spiritual sickness” and several Hmong shamans still practice their healing rituals in Providence.

Phillip Yang has great understanding of what it means to become a shaman since his mother has been a shaman since a very young age; he explained to me that the gift of being a shaman is spiritually bestowed, and passes down from generation to generation within families (personal communication with Mee Yang and Phillip Yang). A person may become aware that they have the gift of being a shaman through a dream, a vision, or through the experience of spiritual sickness, and if they do not respond to this calling it is believed that they will die (personal communication with Mee Yang and Phillip Yang). Mee Yang, Phillip’s mother, is a practicing shaman in Providence whose parents knew she was called to be a shaman when she became inexplicably ill at age five; the shaman called upon to treat her informed her parents that her sickness was the result of her body accepting the spiritual gift of being a shaman. From this early age, Mee began observing the work of older shamans and learning their rituals and tasks; she began to treat people in her village when she turned seventeen. She continues to treat people in Providence that are suffering from ailments ranging from back pain to infertility, or from problems that Western doctors are unable to diagnose and treat, which the Hmong identify as “spiritual sickness” (personal communication with Mee Yang and Phillip Yang).

Deeper study of the beliefs of Hmong shamans reveals the tight interconnectedness of this practice with the agrarian tradition of the Hmong. Jacques Lemoine (2011) studied the rituals and beliefs behind Hmong shamanism in Laos under shaman Xyooj Tsu Yob. In his studies of the *kev neeb*, or “the way of spiritual helpers,” he identified twelve vital “souls” or “selves” of which his teacher spoke. Identifying which of these souls were missing, and where they went, was the key question during soul retrieval healing ceremonies. These twelve souls significantly included the “chicken” soul, the “source of cucumbers and pumpkins” soul, and the “sun and moon” soul—all rich agricultural symbols. The “chicken soul,” for instance, may leave a body for a few days, but soon returns if it strays. The “source of cucumbers and pumpkins” soul is the source of health and fertility, and the “sun and moon” soul never leaves the body, even after death, although it may shift during times of illness. Lemoine highlighted the significance of this system of selves—that animals and gardens (and the sources that made them grow) were so integral to Hmong life that they were symbolized as “vital souls” of each patient.

In addition to practicing shamanism, many of the Hmong use herbal medicines to support health and treat illness; a wide variety of herbs both cultivated and wild are used in cooking, made into tea, or used for washing. From herbs that are “like Viagra” to herbs that will help a woman become pregnant to herbs that will heal a broken bone when applied as a compress, the Hmong have a diverse herbal medicine cabinet. Hmong women are the trusted keepers of this knowledge, especially first generation immigrants who learned herbalism from their mothers in Laos and had access to the full range of plant life. Herbs are used by shamans to support spiritual healing rituals but are traditionally used by all Hmong women in their homes to treat themselves and their families. In Providence, access to garden space, or at least pots of soil for the back porch, is incredibly important in the continued production of medicinal herbs. Continuation of herbal medicine practice by Hmong families in Providence will be discussed at greater length later in this chapter, as well as in the chapter on Hmong agricultural practices<sup>5</sup>.

## B. Hmong Resettlement in the United States

Chimeng Yang states that the Hmong “came to the United States carrying their world with them: their memories of farming, fighting the war, escaping the Communists by the arduous journey from Laos to Thailand, and living in conditions in the refugee camps...They also brought with them their culture and language” (from Ling 2008). Translating these cultural realities and life experiences was a formidable challenge given the drastically different culture, economy, and social structures that exist in the US in comparison to the highlands of Laos. Jan Corlett (1999, p. 1 in reference to Sherman 1988) highlights that the Hmong faced unique challenges beyond just being refugees since they arrived “without basic literacy, numeracy and job skills...They are Third World villagers, exploited by a Cold War, who found themselves awakened in a land of giants with no way to return home.” This section will review the approaches taken by the US government and resettlement agencies in settling the large influx of Southeast Asian refugees following the Vietnam War, in particular the Hmong, and the outcomes of this system. Understanding the resettlement process and its limits will lay the foundation for

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<sup>5</sup> See Appendix for a chart detailing some of the medicinal species grown by Hmong families and their uses.

examining the resilient adaptation that has taken place in the Hmong community in Providence, Rhode Island.

### 1. The US Approach to Resettlement of Southeast Asian Refugees

The United States government's approach to resettling the large influx of Hmong arriving in the late 70s and early 80s was the "scatter" or "broadcasting approach," which focused on decreasing the impact of the refugees' arrival on the host areas by avoiding a high concentration of new arrivals in any one place (Mortland and Ledgerwood 1987; Westermeyer 2011). The primary goal of the US approach was "economic self-sufficiency of each refugee family" through reducing the "negative impact of refugees" and facilitating "the assimilation of refugees into American life as quickly as possible" (Refugee Act of 1980 as cited by Mortland and Ledgerwood 1987, p. 293-294). Refugee resettlement agencies in the US hoped that speedy employment for refugees would decrease the "negative consequences which result when their dissimilarity to Americans creates conflict with American communities," and to "minimize the...burden on American taxpayers" (Mortland and Ledgerwood 1987 p. 294). It was thought that, rather than intentionally relocating Hmong people near each other, it would be beneficial to spread the population out in order to speed up the acculturation process in order to aid refugees in achieving self-sufficiency (rather than relying on welfare) and to "accommodate themselves to an alien culture as rapidly as possible" (Skinner and Hendricks 1979:29 as cited in Mortland and Ledgerwood 1987 p. 295). "Low visibility" of refugee communities was considered a priority in this adjustment period, emphasizing the need for "intensifying their contacts with Americans as individuals" (Mortland and Ledgerwood p. 295).

Resettlement of the first wave of Southeast Asian refugees occurred through sponsors, some of which were family or village relations, but most of which were church groups, American individuals, or voluntary resettlement agencies (Mortland and Ledgerwood 1987). Jessica Goodkind (2006) found through her prolonged work with a group of Hmong women in Michigan that, without adequate training in the English language and American culture, not to mention the trauma of forcibly leaving one's homeland, many of the Hmong suffered from anxiety, depression, and feelings of isolation (Goodkind 2006). Experiences of despair upon resettlement were undoubtedly compounded by the fact that, due to the scatter method of resettlement, most were not settled near their many of their own countrymen, and very little effort was made to consider kinship and community ties in the resettlement process (Westermeyer 2011). There were some exceptions; the Xiong's, who were key interviewees in this project, had an uncle already living in Providence who sponsored their resettlement here.

Jobs attained upon resettlement were mainly low-wage, low-skilled jobs that did not utilize the knowledge and skills that the people had, based on the assumption that refugees had no translatable skills; they were often confusing and unfulfilling jobs, multiplying the distress many people felt as a result of their resettlement (Goodkind 2006). However undesirable their positions were, the Hmong knew they had to do these jobs in order to survive in their new country (Interview with Wang Yang). This outcome was not across the board—there were some instances of communities connecting the Hmong people with jobs that utilized their skills and were jobs the people might choose for themselves, but this typically occurred in cases of Hmong who had received some education in their home country and possibly had some contact with Americans, so that

they already possessed skills translatable to the US economy, and therefore had some idea of what American culture and professional life was like (Westermeyer 2011). This was the case for George Xiong, who had worked as a policeman in Laos and had offered those skills to the CIA during the war; he was stationed with the Providence Police upon resettlement and enjoyed that job for many years. Charlie Xiong had attended school in Laos and was stationed at a factory that made plastic plates in Providence; he had no complaints about his resettlement experience, which was facilitated by International Institute of Rhode Island. For the majority of the Hmong arriving as refugees, however, their agricultural skills were their main skill set—the skill set that brought them prosperity, health, and honor in their home country (Goodkind 2006; Minkoff-Zern et al. from Alkon and Agyeman 2011).

### *Secondary Migration*

As increasing numbers of refugees entered the United States, the scatter approach to resettlement was countered by a new factor: families who had already settled in the US voiced their wishes to serve as sponsors for newly arriving family or village members, thus larger communities or “enclaves” of refugees began to form. In addition, many refugees began to voluntary relocate within the US in large numbers, a phenomenon known as “secondary migration” (Mortland and Ledgerwood 1987). Carol Mortland and Judy Ledgerwood (1987) argue that this movement away from initial placement is an important “adaptive strategy” made by refugees according to kinship relations, patronage systems, and a history of Southeast Asian mobility. Kou Yang (2012) discusses the desire to farm as a major driver of secondary migration in the Hmong community; many moved to California with “the hope of farming.” However, racialized farming regulations in California have contributed (regardless of intention) to the construction of Hmong farmers as a “problem population” and have caused outmigration of the Hmong from California to places like Minnesota where regulation was more conducive to traditional production opportunities and accessing markets<sup>6</sup>; some Hmong in California had to abandon the hope of farming and go back to factory jobs (Minkoff-Zern et al. from Alkon and Agyeman 2011).

Mortland and Ledgerwood (1987) highlight that US resettlement agencies have not viewed secondary migration as a rational and positive decision; it has been seen as an indicator of “resettlement failure” and there have been attempts to establish legislation preventing secondary migration (Mortland and Ledgerwood 1987). The described policies of resettlement that tended to isolate and fragment the Hmong community through a focus on quick job procurement and minimization of their “impact” on American society, along with the misconceptions held by many Americans about the Hmong and their livelihood choices, exacerbated the difficulty experienced by the Hmong in America and led to many negative outcomes (Mortland and Ledgerwood 1987, Goodkind 2006).

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<sup>6</sup> Another factor driving secondary migration to California was the appeal of the extensive public welfare benefits provided there; the number of Hmong in California notably dropped in 1999 as a result of the Welfare Reform Act of 1996, which decreased these benefits (Hmong Resettlement Study; Westermeyer 2011; Vang 2005).

## 2. Negative Outcomes of Resettlement

Upon arrival in the United states the Hmong experienced culture shock, poverty, discrimination, family conflict, youth delinquency, physical and mental health issues, and a lack of opportunities to practice their skills and use their expertise—and many of these challenges are still in play (Yang 2001). Jessica Goodkind (2006) states that the Hmong have experienced particularly high mental distress in their resettlement process due to a lack of meaningful social roles, loss of community support, poverty and economic concerns, marginal position and relative powerlessness in society, discrimination, lack of environmental mastery, undesired life changes, and social isolation.

### *Dietary Acculturation and its Outcomes*

Lisa Franzen and Chery Smith (2009) note that changes in environment and dietary habits have increased incidence of diabetes, obesity and cancer in the Hmong community, and that young people face unique obstacles in trying to reconcile the starkly different food cultures and body image conceptions of Hmong and American societies. Food culture and dietary behavior are dramatically in flux in the Hmong community, especially in the younger generations (Franzen and Smith 2008; Goto, Vue, Xiong and Wolff 2010; Vue, Wolff, and Goto 2011). As the Hmong have become more integrated into American society, they have begun to eat more and more like Americans, especially American-born Hmong children and adolescents who are exposed to American foods in schools. Food assistance programs have been cited as a catalyst for this dietary acculturation, as these programs were the first to introduce Hmong families to American foods that were cheap and accessible in the low-income neighborhoods where the Hmong first settled (Franzen and Smith 2008).

Vegetable consumption is high in the traditional Hmong diet. Commonly consumed vegetables include bitter greens, sticky corn, bitter melon, squash, pumpkin, chili peppers, long beans, yucca, and yams. Vegetables are typically boiled with herbs to make a soup and, when meat is available, it is added to the soup. It is important to note that meat consumption was only occasional, and that foods were never fried. Rice is an important staple and is consumed with every meal, constituting the filling part of the meal—many older Hmong do not feel satisfied if rice is not included with their meal and see this as a problem with American food (Goto et al. 2010). Thanks to a wide range of herbs used in cooking, such as cilantro and lemongrass, Hmong cuisine features a variety of flavors. Herbs also provide a healing touch in Hmong cooking; chicken soup with herbs is considered a powerful medicine, and the Hmong have many herbs that they use interchangeably in chicken soup to treat certain ailments. After a woman gives birth, she must remain in her home with her baby for 30 days without leaving or having visitors, consuming a diet of only chicken soup (containing healing herbs) and rice—no vegetables—in order to regain her strength and keep her baby's spirit safe and unexposed to spirits that may be harmful (personal communication with Phillip Yang). In this way, the Hmong diet plays an important role not only in sustenance but also in spiritual life.

Upon arrival in the US styles of cooking, types of food prepared, and food preferences have shifted in the Hmong community, and great tensions exist between the old and the young generations, leaving mothers and daughters in charge of food preparation in a state of limbo, trying to appease families of varying tastes (Franzen and Smith 2008; Goto, Vue, Xiong and Wolff 2010; Vue, Wolff, and Goto 2011). “Dietary acculturation” leads to intergenerational tensions, with older Hmong wanting to preserve

traditional food culture and younger Hmong assimilating more into the American food culture as this is what they are exposed to (and often pressured by peers to conform to) at school (Goto, Vue, Xiong & Wolff 2010; Vue, Wolff & Goto 2011). This intergenerational tension leaves mothers of generation “1.5” in a struggle to cook for their families in a way that preserves harmony at the dinner table and keeps cultural traditions alive (Vue, Wolff & Goto 2011). The taste for bitter greens and bitter melon, for instance, has decreased in the younger generations and, unlike their grandparents and parents, young people typically do not enjoy these bitter-tasting dishes. This observation supports Kathryn De Master’s (2003) finding that “among the younger generations, bitter flavors do not appear favored” (p. 118). Kia Yang also noted that her children prefer American sweet corn to the Hmong sticky corn (Interview with Kia Yang). In Wa Vue et al.’s study (2011), one interviewee expressed that “Hmong food is us, helping us remember who we are,” highlighting the important link between food and cultural preservation, suggesting that something of Hmong culture might be lost if the young generation continues to choose American foods over Hmong foods.

High consumption of meat is especially characteristic of life in America, as meat in Laos was consumed only on special occasions, maybe once per month. Hmong in Providence have expressed a general attitude that they have to “make up for all the times in Laos when we couldn’t eat meat” and that this has led to unhealthily high meat consumption (personal communication with Joe Vang). A “sedentary lifestyle” is cited as another contributor to increased negative health outcomes, and it is attributed to shifting livelihoods or lack of opportunities to farm. In Laos, subsistence farming meant long days of physical activity, but here in America physical activity is “not strongly emphasized” in Hmong communities (Vue, Wolff & Goto 2011). The reason why physical activity is “not strongly emphasized” in Hmong culture is most likely because it has never before been decoupled from the normal daily routine, therefore a lack of farming activities may be to blame for this shift in physical fitness (Vue, Wolff & Goto 2011). Hmong farmers in Providence, after holding other jobs, list exercise and good health as a motivation for continuing to farm in old age (personal communication with Kia Yang, Chang and George Xiong, and Charlie Xiong).

Rising concerns may contribute to shifts back towards greater integration of traditional Hmong dietary patterns and lifestyle practices in American life, as Milton Gordon’s theory of acculturation would suggest; Gordon suggests that acculturation a dynamic process with potential for bidirectional movement between stages in which individuals are “obtaining, maintaining, and/or abandoning values at the macro and micro levels (Milton Gordon 1964 as cited in Franzen and Smith 2008). This theory is supported by the findings of this research, which revealed a self-directed shift back towards Hmong diets in several families interviewed in Providence; this finding will be explained in great detail in a later chapter on Hmong reactions to food and farming in the United States. Dietary acculturation, its outcomes, and Hmong responses to these outcomes in the Providence context will be discussed in the later chapter on Hmong reactions to food and farming in the United States.

### 3. Positive Strides in the Face of Resettlement Challenges

The Hmong people’s agrarian background, war experiences, poor school performance, continued poverty, and dependence on government welfare have deemed them “social failures” in contrast to earlier Chinese and Japanese immigrants who were

seen as “model minorities” due to their ease of integration into US society and low “impact” on the American people (Minkoff-Zern et al. from Alkon and Agyeman 2011). Vincent Her and Mary Louise Buley-Meissner call attention to the fact that most scholarship on the Hmong in the US has focused on either the politics of their involvement in the Vietnam War or a sociological evaluation of the support they have required in order to survive in America. With this limited scope they argue, “Consequently, many stereotypes of Hmong people persist: they are the least prepared of all refugee groups to succeed in modern society; they are resistant to change...and they are unable to assimilate fully into American culture” (2012 p. 3). In the Hmong Resettlement Study’s site report for Providence, Rhode Island, conclusions indicate that the outlook for the Hmong community in Providence is “relatively positive with the expectation that they will reduce their welfare dependency rate below the average for United States’ citizens.” Conclusions of this study focus heavily on the prospects of Hmong employment in local factories, hinging their positive expectations for the progress of the Hmong community mainly on this point. The study notes that there is, however, an “undercurrent of racial tension” within the community, given their general confinement to high crime neighborhoods.

This narrow focus of the Hmong community fails to take into consideration the skills, knowledge, and unique contributions of the Hmong community to the city of Providence, and paints a picture that is much more bleakly black-and-white than that of my findings. When one looks upon the gardens of the Hmong in Providence, however, and their freezers stuffed with produce throughout the year, framing of the Hmong Americans as a “social failure” is called into question, and when the adaptations made by the Hmong are studied in such a way that their agency and their knowledge becomes the focus, it may be possible to dismantle the fallacies underlying previous studies of the Hmong.

### *Dynamic Resilience*

In spite of the obstacles faced by the Hmong through the resettlement process, there have been some gains made for Hmong society thanks to the inherent resilience of the people themselves, supporting the idea of acculturation being a dynamic process in which subjects may choose multiple directions in adapting and readapting to their new circumstances (Milton Gordon 1964 as cited in Franzen and Smith 2008). This resilience is evident in the Providence Hmong community, with individuals who are excelling in fields such as architecture and computer technology, who are turning their farming traditions into successful businesses, who are feeding their families of eight from a 10 x 10 garden plot, and who are earning college and graduate degrees. All the while, the Hmong remain a cohesive community, preserving traditions such as farming, cooking Hmong foods, practicing herbal medicine and shamanism, gathering regularly as a community, and keeping the Hmong New Year celebration alive. Aranya Siriphon (2006) aptly notes,

*The Hmong are not passive actors who wait for help from development workers and other authorities. Instead, they actively engage themselves within a process of social negotiation between unequal socio-economic and political groups, a ‘dynamic knowledge system’...used as a strategy to struggle against, and reconcile with, more powerful forces. (p. 65)*

This ability to adapt in spite of difficulty is seen in the positive strides that have been made by the Hmong in the United States; Kou Yang (2001) highlights the strides Hmong Americans have made and continue to make in education, entrepreneurship, and civic involvement. Vincent Her and Mary Louise Buley-Meissner's *Hmong and American: From Refugees to Citizens* (2012) features a collection of essays from Hmong scholars, creating a space for Hmong voices to contribute to a more holistic and nuanced discussion of Hmong life in America, writing on subjects from identity to sexuality to the arts in a multicultural, multigenerational fashion; their collection not only opens up the dialogue about Hmong American life but emphasizes the voices of Hmong scholars in this endeavor.

### *The Advancement of Women's Rights*

Another key improvement in the Hmong community through their resettlement has been the advancement of women's rights; Hmong women here are accorded greater equality and have greater leverage in terms of educational and livelihood choices (Chan 1994; Yang 2001). Traditionally Hmong women "had to obey their menfolk in every aspect of life; not only was bride kidnapping an acceptable practice, so were wife beating and polygamy" (Chan 1994, p. 53). At mealtime, tradition holds that women must serve the men and then wait "silently and submissively" until the men are finished to have their own meal (Vang from Her and Buley-Meissner 2012). Ka Vang questions whether or not the submissive characteristics of the "good Hmong girl" are necessary to Hmong culture, and if Hmong culture would be diminished if women were to break out of these roles (2012). She contends that the fear of cultural diminishment is "unfounded and ridiculous," and that culture will "flourish" if women have more rights, creating a new image of the "good Hmong girl" (from Buley-Meissner 2012, p. 110).

Trends show that Hmong women are gaining rights and achieving great things alongside Hmong men in the US; as of 2001, three out of every five Hmong lawyers in California were women, and in 1999 the number of Hmong men and women students in many universities was almost equal (Yang 2001). Minnesota elected the first Hmong state senator, a woman named Mee Moua who served from 2002-2010 (Minnesota Legislative Reference Library). Hmong women also began to organize themselves and assert their autonomy through the formation of the Hmong American Women's



A sanctuary of beauty and abundance is created by Hmong growers in this community garden in Southside Providence, creating life in a section of the city often seen solely for its widespread poverty, rather than as a hub of an array of skills, cultures and knowledge systems.

Association and the Association for the Advancement of Hmong Women. This is not to say that all Hmong women in America have achieved equality; in particularly traditional families women cannot attain the full benefits of societal participation because of the restrictions imposed upon them by their husbands, fathers, brothers, and even traditional women in their families, and continue to spend their time on household duties (Yang 2001; Vang from Buley-Meissner 2012). Ka Vang asserts that “if other Hmong women and I are not invited to the men’s table, then we will just have to create our own women’s table and the men will have to refill their own dishes. But I think it is much wiser for both men and women to eat together” (from Buley-Meissner 2012, p. 111). The idea that “1.5” or second generation Hmong in America have the opportunity for a very different life is a theme that arose in interviews for this project as well; struggles and downfalls of integration were highlighted, but so were the benefits of opportunity and the ability to choose a better life (personal communication with Chang Xiong and Julie Yang).

Chang Xiong is a symbol of Hmong women’s success in Providence. Pak Express Farm, although operating under the partnership of Chang and her husband George, is largely a product of Chang’s desire to be her own boss and to make her own business. Her son-in-law Joe Vang says, “she’s always had the gift to do business” and “she’s always very innovative” (Interview with Joe Vang). The views of Chang’s son-in-law and husband regarding her business ability, along with her leadership role in the business, reveals an important shift in gender dynamics, and indicates that women’s roles in agricultural persistence in this context are working to mitigate cultural patterns of inequality through the empowerment of women. At the Pawtuxet Village farmer’s market the banner at the Pak Express table reads “Chang Xiong, Organic Farmer,” inviting customers to try her famous homemade nime chow and to buy some of her chemical-free produce. Chang has been an enthusiastic proponent of organic produce in her extended family, teaching them about the benefits of eating produce that has not been treated with chemicals and providing them with high-quality produce from her farm and her backyard garden. She even raises a large flock of chickens in her backyard. She will be the first to tell you that she is “a very busy lady.”

In this research involving the Hmong farming community in Providence, it is clear that great achievements have been made even in the face of the arduous challenges presented by resettlement. The next section will outline the ways in which the Hmong settling in Providence brought their worlds with them, and what kind of new world they encountered in this industrial New England city. This will set the stage for continued exploration of how these seemingly irreconcilable worlds are shaping and may continue to shape one another in a mutually beneficial way.

### C. Establishment of the Hmong Community in Providence

Phillip Yang hospitably ushered me into the Hmong community after we met at a SCLT Providence Community Growers’ Network meeting in the spring of 2012; he invited me to visit Glenham Street garden to see the two plots that he and his wife tend together, and where at least ten other Hmong families grow food right in the heart of Providence’s Southside neighborhood. The following week, Phillip took me to visit the Hmong Community Farm in Scituate where about 50 families tend plots of roughly 35’x 80’. The space is several acres in size, surrounded on all sides by forest and tended only by Hmong, creating a sense upon entrance via a narrow dirt road of entering a world far away from Rhode Island. Both the garden and the farm are resourceful, abundant, verdant

pieces of land, shaped and defined by the Hmong style of farming, which is characterized by high species diversity, intercropping, and resourceful use of materials. The relatively generous space at the Hmong Community Farm allows families to grow more space-demanding crops like rice, soybeans, and corn that they can't grow in community garden plots. Homemade scarecrows (built from tree branches erected in the earth and draped with raincoats or plastic covers from the dry-cleaner) stand as sentinels around the perimeter of the farm, preventing the encroaching of hungry bandits such as raccoons and deer from the surrounding forest. At the Glenham Street community garden it is not difficult to discern which plots belong to the Hmong, as Phillip showed me with pride; Hmong plots can be spotted by their intricate and diverse planting arrangements, their multiple levels of growth, their lack of exposed soil space, their vibrant array of hues, their often exotic species, and their general vitality. The discipline of the Hmong growers was evident in this first visit, as they were already harvesting a first round of crops although it was still early in June—they risk the potential losses of an early freeze by starting their planting in early March, in hopes that they will reap an early harvest of cool-season crops like peas, mustard greens, and cilantro. Tree branches twined together form rustic and effective trellises. In the community garden, chicken wire covered with bitter melon or Asian long bean vines create edible living walls between plots, performing dual roles of creating boundaries and maximizing growing space. The feeling of being in another country emanates from these spaces, suggesting the place-making power of garden space, that a part of home might be reconstructed from seed and soil.

The Hmong community in Providence is sizeable, with over 100 families residing in Providence, Cranston, Johnston, Woonsockett, and the surrounding areas today (personal communication with Phillip Yang). It is difficult to precisely estimate the number of Hmong residing in the city, as families are typically large, and secondary migration (both inward and outward) is fairly frequent. The 2010 US Census reported a population of 1,049 Hmong in Providence (Hmong American Partnership). The number of Hmong people in Providence peaked in 1981 with approximately 2,100 persons, possibly as many as 2,500, according to some Hmong leaders (USDHHS 1984).

## 1. A New Start in Providence

As the first wave of refugees arrived in the early 80's, Hmong along with Cambodian, Lao and Vietnamese, US resettlement agencies tried to disperse the Hmong around the country in cities including Providence, Philadelphia, Chicago, Des Moines, Kansas City, Missoula, Tulsa and Salt Lake City (Pfeifer, Lai and Arguelles 2003). The International Institute of Rhode Island and the Catholic Social Service were the two main agencies providing sponsorship for Hmong families resettling in Providence, and an abundance of jobs in the jewelry industry made Providence a likely place for resettlement at this time (USDHHS 1984). Charlie Xiong and his family were sponsored by the International Institute, which he found to be helpful; school training was provided for one month and then they were placed in factory jobs (Interview with Charlie Xiong).

### *Employment*

City leadership was welcoming to an influx of immigrants to Providence and the surrounding areas as the jewelry manufacturing industry was in need of labor. It is unclear, however, whether there was really a lack of labor in the area, as unemployment

in RI was high at the time due to the demise of other manufacturing industries and a population increase from 1950 to 1970, or just a shortage of people willing to work in positions that often meant seasonal layoffs, little job security and exposure to hazardous working conditions, as these were the realities of the jewelry industry as identified by the Hmong Resettlement Study site report for Providence (USDHHS 1984). In addition to jewelry manufacturing, the Hmong also worked in metal fabricating and machine shop industries—other entry-level jobs in which English language ability was not a prerequisite; the site report states, “Willingness to work is a more important qualification.” The language barrier was not the only challenge of adjusting to factory work from an agrarian lifestyle; the difficulties of the transition were accentuated, Kathryn De Master (2003) notes, by the abrupt integration into a society that “championed …a prevailing notion of historical linear progress and assumed an ideology of technological, governmental, and cognitive authority” (p. 51). Thus, factory placements were seen by those facilitating resettlement as an improvement from “primitive” farm work (De Master 2003). For the Hmong, however, this was not the case, as the absence of hard work in daily life especially is often equated with laziness, a highly distasteful trait in Hmong culture (De Master 2003). While farm work required the Hmong to engage in physically demanding outdoor work every day in Laos, factory work was often sedentary in nature and, without farms to tend, many would return home after the workday only to sit in their apartment and watch television, unsure what else to do (Interview with Phillip Yang). Factory workers in RI at the time were among the lowest paid in the nation; the only states paying their factory workers less were Mississippi and North Carolina. According to the site report, “many Hmong are locked into permanent low wage positions; few companies with large numbers of entry level Hmong employees have any burning desire to train or upgrade the quality of their workforce…jobs performed by the Hmong are repetitive, tedious or monotonous” (USDHHS 1984, p. 13).

Companies reported that they traditionally relied on immigrant, refugee and other first and second generation workers for tasks like producing necklaces, rings, wire and pocketknives, and liked the Hmong in particular because “they don’t steal” and the Southeast Asians in general because they have “the lowest absenteeism of any group we’ve hired” (USDHHS 1984, p. 14). The fact that unemployment in RI was so high at the time and yet manufacturing jobs were available to those “willing” to work those jobs is an illuminating contradiction, calling into question the kind of work and the kind of benefits available through these positions. What kinds of environments are accessible to refugees upon their arrival? This is a question that will be interrogated in greater depth in the literature review. Of course there were some people in the Hmong community who expressed contentment with their jobs and satisfaction with the compensation they received, like one man at Gorham Silver Company who said he would work there for the rest of his life (USDHHS 1984). Interviews done for this research gathered a sense from the older Hmong that they would do anything upon arrival in the US to survive here and provide for their families; there were no complaints about entry-level jobs or resettlement programs, although neutral descriptions indicated that training periods were short, pay was low, occupational hazards existed, and work was tedious (Interviews with Charlie Xiong and Wang Yang). However, especially today, there are many Hmong in Providence and elsewhere who have solidified successful occupations and gain great

fulfillment from their work; livelihood choices of the Hmong in Providence will be discussed in depth in a later chapter.

### *Housing and Welfare Support*

Upon their arrival in Providence the Hmong found housing in a concentrated area, with no family living farther than a mile from the rest of the community, and with most living within half a mile of each other (USDHHS 1984). Extended families often rented different floors of the same multi-level Victorian homes, mostly in the West End and Elmwood neighborhoods where rent was least expensive but where there was also high incidence of crime. The Resettlement Study's site report for Providence also notes that there was "tension between the Southeast Asians and Blacks who live in the same relatively high crime neighborhoods," and that this crime was "a topic of constant concern among the refugees." It was "impossible to determine to what extent crime inflicted on the Southeast Asians is racially motivated or a consequence of geography" but the Hmong listed this racial tension as a highly undesirable aspect of living in Providence. The report notes that the larger Providence community received the Hmong and other Southeast Asian refugees with a range of responses, from indifference to neutrality to enthusiasm, and that residents in contact with the Hmong viewed them as "hard-working, law-abiding, family-centered people" (USDHHS 1984, p. 5).

The city of Providence, according to the Hmong Resettlement Study site report, provided "a full range of refugee services" to the Hmong and other Southeast Asians during the early 80s, including English language instruction and job placement services (USDHHS 1984). The Providence school department hired over 30 bilingual teacher aids; other places of employment outside jewelry factories included welfare offices, neighborhood health centers, and hospitals. Each Southeast Asian ethnic group had a mutual assistance association supported in part by contracts from the state resettlement program to assist their transition to life in America<sup>7</sup>. Assistance was also provided through Rhode Island's general public assistance (GPA) program, which provided \$487.00 per month in the winter for a family of four and included medical coverage<sup>8</sup>. Single people, childless couples and families were all eligible to collect GPA, as well as people who were employed but earned less than the GPA standard of need for the family's size. Persons who earned more than the GPA standard could also qualify to collect assistance if they had great medical need. At this time able-bodied heads of household who were unable to secure jobs were required to report to "workfare" by state law, which entailed working full-time for the city and earning GPA benefits plus \$40 per week (USDHHS 1984).

### *Rethinking Refugee Support*

The question of how to value Hmong knowledge and skills is integral to this research, particularly in conceptualizing the continued shaping and growth of the Providence urban farming community. But these questions fit into a larger context, too: how to rethink the largely interventionist, authoritative approach towards meeting the

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<sup>7</sup> The mission of the Hmong American Mutual Assistance Association is to promote leadership and educational advancement for youth and teens, encourage self-sufficiency of individuals and community, and promote and maintain Hmong cultural heritage. (HAMAA.org)

needs of refugee communities that has largely characterized US resettlement efforts detailed here, both at the time of resettlement and beyond. Examining the literature on the Hmong resettlement process (and calls for new approaches based on greater knowledge exchange) not only provides background on the Hmong American experience, but speaks to a key inquiry of this project—the inquiry of how diverse communities can be supported on their own terms, in a way that empowers the skills and knowledge systems they carry with them from their cultural heritage and past experiences.

Questions still remain with regards to the kind of support that is most helpful for refugees, particularly the Hmong, in building the kind of lives they most desire here in the US. Although benefits were available for them in Rhode Island, these benefits did little to help them connect their own knowledge and skills to fulfilling and culturally relevant jobs, or to set them up for upward mobility out of the menial positions often available to them upon arrival; welfare dependency was therefore common (Mortland and Ledgerwood 1987; Corlett 1999). The majority of Hmong heads-of-household interviewed for the Hmong Resettlement Study's Providence Site Report said that it was essential for both husband and wife to hold jobs if the family was to stay off welfare, creating tension in a culture where women typically tended to household duties such as cooking, cleaning and caring for the children in addition to farming; even with a shift in these traditional roles, large families found it difficult to pay the bills.

A struggle to pay the bills meant that the Hmong were restricted to the high-crime neighborhoods where rent was the lowest, and where they had no choice but to endure the racial tensions existing there (USDHHS 1984). In personal communication with Wang Yang, a first generation immigrant, he explained through his son Phillip's translation that one of the best parts of the Hmong Community Farm in Scituate, which the community secured in 1982, was the fact that it was open only to the Hmong—in this space they did not have to fear having things stolen from them or encountering other ethnic groups that they did not trust. It is unclear to what extent this distrust emerged from experiences in low-income Providence neighborhoods or whether it was a product of living as an isolated group in the Laotian highlands; both circumstances most likely contribute to some extent.

Currently there is a great deal of positive cultural exchange happening in community gardens in Providence where the Hmong share space with people from Cambodia, Liberia, Haiti, Spain and other countries. Exchange also occurs between Hmong farmers and American farmers. The positive strides made through cultural interchange in the context of gardens and farms will be expanded upon in a later chapter on Hmong farming practices and knowledge exchange. Carefully considering the ways in which intercultural knowledge exchange benefits the actors involved, I argue, is an important area of examination in work to reshape the process of refugee resettlement and continued community support; this idea will be explored in greater detail in the chapter on suggestions for further support of the Hmong farming community in Providence.

The Hmong in Providence actively sought out farming opportunities upon their arrival, finding in their gardens a way to shape their lives in Providence rather than let the chaos of resettlement to a foreign place control them. Today there are many gardens and farm spaces in and around Providence bursting with lemongrass, bitter melon, long beans, sticky corn and other Hmong crops. The process of building these opportunities for the community (and by the community) will now be reviewed.

### *Reactions to Life in Providence & the US*

Chimeng Yang (2008) reflects that the Hmong “came to a new world of high technology, high-speed highways, high crime out of control, explosion of the number of career possibilities, fast-food restaurants, MTV, the information superhighway, freedom of speech and expression, individualism, and many cultures and values that they could not comprehend or accept” (from Ling 2008 p 218). Phillip Yang, a resident of Providence recalls, “It’s just like a brand new baby just born for us, in this country.” His reflections support Chimeng Yang’s description, highlighting the stark differences between life in Laos and life in America:

We as a family were not exposed to the city, never been to the city, never lived in the city, so we had always been up in the mountains as farmers... But when we came to this country, we had TV, lights, water, fridge...we had cold water, we had hot water...we don't have to worry. We have a house to live in...any kind of weather, you don't have to worry about. But we lived outside back in Laos...all you have is a roof to cover you and a little bit of siding to cover you, but you can still see through to the outside. (Interview with Phillip Yang)

The drastic shift in lifestyle and context described by Phillip Yang illustrates the great significance of exploring, as this research does, the methods employed by the Hmong in adapting to this starkly different world, in not only learning a new language and learning about new social norms, but in adjusting to every aspect of modern life, from sturdy homes to electricity and plumbing to a technology-driven society. It illustrates the great challenge and also the great importance of adaptation in this context.

Phillip Yang discusses the difficulty of transitioning to factory jobs after a lifetime of farming, but emphasizes that they did not question or resist this change, as their primary concern was survival in this new place. His father, Wang Yang, took his first American job at a poultry factory where he experienced the shock of seeing how chicken are industrially produced. Mr. Yang said of his father's job, “Well, its different, but he had no choice. He has to go to work.” The methods used in industrial poultry production are a stark contrast to how they were raised by the Hmong in Laos, free roaming in the open air; Phillip Yang describes, “Back home in Laos we have our own chickens and our own farm—chickens, pigs, cow, horses...that's yours. We don't have to pay any tax on it, nobody come and get them, that belongs to you, you know? Its much different from in this country.” Wang Yang worked in the poultry factory for over ten years until it shut down, then went to work at a jewelry factory, along with his wife Mee Yang. Factory work was difficult not only because it was different and alien; Phillip Yang stressed, “If you don't speak English, you don't have any skill...it's very hard.” Mr Yang's parents, along with most Hmong of their generation, did not speak English and still primarily speak Hmong, so opportunities beyond factory work were not accessible. The Yang's have now retired from factory work to help care for their grandchildren and do farm work, a lifestyle more continuous with their life in Laos but still embedded an unfamiliar land.

Chang Xiong highlights the contemporary problems she has observed in Providence during her life here, namely high poverty rates and the need for more of a focus on education, lamenting,

In our city, in our city a lot of poor people, you know? Very hard for them but I think so that's why we have to call every children to go to school. Everybody go to school and they know they get good job if they apply everything they got. I think American people they worried, they very worried about this country, what is going on. But I think don't worry, just look around to the school, to the young people and how the young people are doing. (Interview with Chang Xiong)

Chang's insight reveals a confidence in the educational opportunities that are available here in the United States; she considers access to education and the ability for young people to choose their career path to be a great positive of American society (personal communication).

Charlie Xiong also provides a voice for positive aspects of life in Providence and America, not a surprising response coming from a man who always has a smile on his face. He says life in America is good because it's "convenient" and "easy." He made friendly connections in his community that helped him adapt to life here, and enjoys having access to cars for quick transportation and machinery like his tractor for easier farming. A Southside garden leader spoke of the convenience that is characteristic of American culture and society, something she enjoys as a mother of eight who has little time to spare (personal communication).

Highlighting a key focus of this research project and a central component of Hmong life, interviewees in Providence described the difficulty of learning how adapt their farming practices to this context, especially when they first arrived in the United States. These challenges include how to respond to increased pest problems, how to manage soil fertility, and how to grow traditional Hmong crops in a drastically different climate (personal communication with Kia Yang and Phillip Yang). Although Hmong knowledge of growing food is expansive, their traditional method of "swidden" agriculture did not prepare them to maintain soil fertility in their small garden plots from year to year (Lee 2005). Gary Yia Lee (2005) notes that swiddening was "almost as a culture for the Hmong," so transitioning from this migratory farming practice has been a significant obstacle. Kathryn De Master (2003) explains that the "slash-and-burn" technique employed by the Hmong throughout history influenced some Westerners to assume that the Hmong were "unsophisticated" agriculturalists, lacking the ability to adapt to their new society (p. 52). This cultural prejudice created yet another obstacle for the Hmong, but not an obstacle that they could not overcome. George Xiong explained to me that, when he was charged with locating farmland for the Hmong community, he found many forested lots and asked the DEM if he could "just burn them." The DEM said no, but Mr. Xiong kept looking until he found farmland that was already clear, and the Hmong have been stewards of that space for roughly thirty years now, proving their adaptive capabilities despite their inability to continue all the methods they employed in highland Laos (Interview with George Xiong).

Additionally, coming from a place where chemicals were not used in farming, and were not even thought of in the context of farming, the largely chemical-driven agriculture system of the US left many growers confused about their options for managing pests and soil fertility, and unaware of the occupational hazards of applying chemicals. These and many more unique challenges of growing food and continuing a

farming livelihood in this country will be the focus of the later chapter on Hmong farming practices in Providence, Rhode Island. The next section will provide detailed background on the establishment of the Hmong farming community in Providence, as well as other ways that the Hmong keep their cultural traditions thriving in this city.

## **D. Farming Opportunities and Cultural Continuity in Providence and Beyond**

Kia Yang settled first in Iowa but soon left because of the lack of garden space, and came to Providence after hearing from relatives that there was community garden space available here. This decision to again uproot and move to a new city solely based on the desire to have garden space speaks volumes to the value of agricultural persistence in the lives of many Hmong. Kia Yang's son is eager for her to relocate to North Carolina to live with him and his family, but she says she is in no hurry because she has a nice garden here, and a sense of autonomy in having her own home and growing a large amount of her food; his promise that she can cultivate part of his property is the only reason why she's keeping this option open for the future. Pang Yang, a third generation Hmong woman who sells at the Broad Street farmers' market, says that her grandmother's transition to life in the US was eased by the garden space her host family let her use, and the familiarity and continuity that space provided. The voices of these Providence women echo Jan Corlett's summation of Hmong women in Sacramento: "Although they abandoned their traditional farming practices and began new lives in urban areas, vacant lots became small farms, and visible representations of a transplanted culture" (2003, p. 377-378).

### **1. Putting down roots in Providence: the search for land**

The process of securing garden and farm space for the Hmong started when American woman approached George Xiong at his workplace in 1980 and said to him, "I see many Hmong families garden in their backyard, do your people very much want to garden?" and he replied "Oh yes, we want to!" She then helped George to gain permission from Roger Williams Park to start a community garden there for the Hmong, with plots of about 20 square feet per family.

#### *The Hmong Community Farm*

After growing there for two years, RI refugee coordinator Cleo LaChapelle came to George's office and asked, "Your people like to farm? Why don't you go look for a bigger farm?" George said, "you go look for a bigger farm for us!" After reviewing several pieces of land offered by the city, many of which were unsuitable to farming, George was hired to research available land, both public and private. He ran into difficulty when he learned that forested lands were not fair game—they could not burn forests and transition them to farmland as they did in Laos. After a long search, the land that is now the Hmong Community Farm was found through the RI Department of Environmental Management (it is public conservation land) and is leased through the city of Cranston.

#### *The Role of Southside Community Land Trust: Access and Opportunity*

Another key connection in creating space for Hmong farming practice was the early relationship between the Hmong community and Southside Community Land

Trust<sup>9</sup>; founder Katherine Brown collaborated with members of the Hmong community to create the first SCLT community garden in what is now a thriving network of gardens in the Southside neighborhoods and throughout the city. Currently over 75% of SCLT program participants are people of color, with many participants being first and second generation immigrants from Laos, Cambodia and Vietnam, and others coming from a variety of African and Central American countries ([southsideclt.org](http://southsideclt.org)). Phillip Yang, president of the Hmong United Association of Rhode Island, also serves on SCLT's Community Growers Network Council, and several Hmong growers serve as leaders of the community gardens where they grow.

Katherine Brown's<sup>10</sup> name is often raised as a key person in helping the Hmong put down roots in this city and its soil. The community gardens on Glenham Street, Somerset Street, Burnett Street, and Potters Avenue are largely tended by the Hmong community, along with several other ethnic groups of refugees and immigrants who live in the area. The Hmong make use of the available space ardently—many tend plots in several gardens, have space at the community farm, and tend a backyard garden, producing a large amount of food for their families. Urbanites may see this as a lot of farming, but the Hmong still feel cramped in the space that would be dwarfed by what they used to have in Laos. More land is always desired, but the available space is capitalized upon through intercropping and successive plantings throughout the season, producing as much food as possible on a small space; use of cropping techniques to maximize use of space was also observed in Hmong gardens in Madison, Wisconsin by Kathryn De Master (2003) and in Sacramento, California by Jan Corlett (1999, 2003). After many years of adapting and sharing knowledge among their community, the Hmong have learned to adapt well to the New England climate and its stunted growing season, but the unpredictability of the seasons (the only constant in farming) creates new challenges each year. Many growers from these community gardens sell produce through SCLT's Community Growers stand at the Broad Street farmer's market. SCLT has also supported the Hmong farming community through its Urban Edge Farm beginning farmer training program in Cranston. Two of the families involved in this project started their farming businesses through this program, and now lease land from SCLT. These pathways for farmer entrepreneurship will be explored in the chapter on Hmong farming practices.

## 2. Cultural continuity through traditional medicine practice

In addition to farming, the practice of traditional medicine in the form of shamanism and herbalism is a form of cultural continuity in Providence. The Hmong community accepts modern medicine to varying degrees but is generally suspicious of the authority of Western doctors, as is chronicled in Anne Fadiman's *The Spirit Catches You and You Fall Down* (1997). According to one of Fadiman's interviewees, "The doctors can fix some sicknesses that involve the body and blood, but for us Hmong, some people get sick because of their soul, so they need spiritual things" (p. 100).

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<sup>9</sup> The mission of Southside Community Land Trust is to provide access to land, education and other resources so people in Greater Providence can grow food in environmentally sustainable ways and create community food systems where locally produced, affordable, and healthy food is available to all ([southsideclt.org](http://southsideclt.org)).

<sup>10</sup> Katherine Brown is a former Executive Director of SCLT.

### *Hmong Shamanism in Providence: challenges and persistence*

Phillip Yang and his mother, Mee Yang, agree that modern medicine is sometimes necessary. However, when someone goes to the doctor and the doctor cannot figure out why that person is ill, or when modern medicines do not work, the Hmong attribute the ailment to spiritual sickness; this is when a shaman is called upon to heal that person and retrieve their lost soul, or *neeb* (personal communication with Phillip Yang and Mee Yang; Fadiman 1997). As one of Anne Fadiman's (1997) informants stressed, "Your soul is like your shadow...sometimes it wanders off like a butterfly and that is when you are sad and that's when you get sick...Sometimes the soul goes away but the doctors don't believe it. I would like you to tell the doctors to believe in our *neeb*" (p. 100). Mr. Yang has observed his mother heal people who have been told they only have months to live, and witnessed his brother be cured of chronic back pain. He says, "I believe myself very strongly that it works...she helps a lot of people...everybody knows her." He emphasizes that when his mother sees patients, she heals out of compassion and because it is her gift, she does not practice for money or ask for anyone to pay her. This distinction, Mr. Yang explained, is an important difference between Western medicine and Hmong traditional medicine.

The practice of shamanism faces formidable challenges in the US, as some families who convert to Christianity either renounce their roles as shamans or no longer believe in seeking the assistance of shamans when they are ill (personal communication with several Hmong interviewees; Ng 2008, from Ling 2008). Traditional practices like animal sacrifice (used for the purpose of soul retrieval) are also difficult in urban settings like Providence where it is not always possible to keep animals, where buying live animals is a challenge, and where the reactions of neighbors might be negative (Interview with Mee Yang). In Laos where families raised free-roaming animals such as chickens, pigs, and cows, and had no neighbors other than Hmong families, such practices faced no obstacles or potential for misinterpretation by other cultures.

As Anne Fadiman (1997) explained, the practice of animal sacrifice in Hmong life is embedded in culture and spirituality, and communal use of the meat of the sacrificed animal is ecologically sound, as almost no meat is thrown away. In contrast, Americans are appalled by the idea of animal sacrifice, yet often have no concept of the connection between a live animal and a meal—large amounts of meat are wasted in this culture. With such divergent views of the roles of animals in our lives and the role they play in sustenance, there is great misunderstanding surrounding animal sacrifice in the context of *neeb* ceremonies and therefore the Hmong face many constraints in practicing such rituals in the traditional way (Fadiman 1997).

Some people within the Hmong community have stopped following the shamanic healing tradition. Kia Yang is now a Christian, and shared with me that she no longer feels the need to see a shaman and doesn't believe that those called to be a shaman must accept it if they are Christian<sup>11</sup>, because she says, "God will protect me" (personal communication). She does, however, still use medicinal herbs as this is seen as a practical form of medicine that may overlap with a shaman's practice but can also be separated from animistic spirituality. Others believe that, "in the shaman religion or shaman tradition, it's regular people who believe it, you can change into Christians, you can

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<sup>11</sup> This belief is in contrast to the traditional Hmong belief that, once called to be a shaman, you must accept or you will die (Interview with Phillip Yang and Mee Yang).

change into Catholics, you can change for not to do anything, and it's fine (personal communication with Phillip Yang and Mee Yang). In Mr. Yang's eyes, shamanism is not just part of the animistic religious framework but a way to remedy the deficits of modern medicine. Mr. Yang also raised the point that time constraints and changing lifestyles, particularly among the young generation, also lessens the amount that people seek out shamans for healing. He mused, "I guess a lot of families like myself in the younger generation, we just don't have time to do these shaman performances, and the only time that I do them is if I feel really sick, if I call the doctor and they could not find what's wrong."

Regardless of the challenges of being a practicing Hmong shaman in the face of urban lifestyles and American culture, Mee Yang keeps the tradition thriving in the Providence community. As one of the last old-generation shamans who came from Laos to Providence, Mee Yang is well known in the Hmong community; many people seek her help in healing their spiritual sickness. The most common ailment she treats is infertility in women; with a combination of shamanic performance and herbal medicines, she has great success in helping women conceive children. Although many in the younger generation rely heavily on modern medicine, fertility is an area of health that continues to link young Hmong women with their healing elders. The ability to continue growing herbs for medicine is an important component of continued practice by Hmong shamans in the US, and continuing to grow these herbs in Providence has been an important adaptation for Hmong shamans and herbalists alike, enabling them to persist in many of their healing traditions. Mee Yang has an array of potted medicinal plants that she carefully coaxes through the winter by keeping them in her living room; during the growing season the plants are kept in the backyard. The valuable array of botanical medicine at Mrs. Yang's fingertips allows her to respond immediately to various needs of those who seek her healing knowledge and spiritual intervention.

### *Hmong Herbalism in Providence*

I observed widespread continued use of herbal medicine in Hmong gardens, farms, and homes—medicinal plants are often interplanted with other crops and are found in most Hmong homes as potted plants that are kept in the backyard during the warmer months and brought indoors during the winter for continued use. A wide range of species is utilized although the shorter growing season and cooler climate of Providence means that not all tropical species can be cultivated here—Kia Yang shared with me that when friends and family return to Laos for visits, they often bring back myriad herbs, in the dried form, that are not easily accessed in the United States. Dried herbs can also be found for sale at community events like the Hmong New Year celebration. The Hmong have found by surprise that some plants they use are common here—Vue Yang and Mee Yang both found Hmong medicinal plants for sale at Home Depot and shared with their friends and family this surprising find. Hmong knowledge of herbal medicine also reveals that culinary herbs popular in America such as dill, mint, basil and lemongrass are useful for common ailments like headaches and indigestion. Various uncommon, tropical varieties are grown as well, demonstrating the impressive ecological adaptation achieved by the Hmong farming community in translating their tropically-based agrarian tradition to this context.

Most Hmong in Providence continue to use herbal medicine although the knowledge and practice is declining with the younger generation. As younger Hmong

women have less time at home with time-consuming jobs outside of the home, the task of passing on the detailed and expansive knowledge of herbalism is difficult, and while many of the younger women still use herbal medicine to some extent, many hold considerably less knowledge than their mothers and generations before (personal communication with Julie Yang). Thai Yang grew up receiving his mother's herbal treatments; he "never liked it" as a child but now that he's grown up he "can tell that it works...it really does help" (Interview with Thai Yang). He recalls the misunderstanding that resulted from a teacher's lack of understanding of Hmong herbal medicine when he was in school:

"Some medicine it leaves stains on you and stuff, so we used to go to school and the teacher thought that it was a bruise mark and stuff but we told her it was just herb medicines...then we had to bring our parents to school...and they say, what is the markings? And we tell them its just medicine." (Interview with Thai Yang)

Long Yang says that, growing up, he "never questioned" herbal medicine because he "grew up using it." Now, however, he only uses it when his mom "forces" him to. He is skeptical of its efficacy because of the lack of scientific research on these plants and their medicinal qualities, asking, "is it proven?" He thinks "it would be helpful if people actually studied the Hmong medicine." While scientific study of Hmong medicinal plants is beyond the scope of this research, the cultivation of medicinal herbs by the Hmong in Providence will be discussed in further detail in a later chapter on Hmong agricultural practice, and a chart listing medicinal species observed in Hmong gardens and farms can be found in the Appendix.

## **IV. LITERATURE REVIEW**

First I will review the literature on the United States' approach to resettlement of the Hmong, the role of knowledge in the resettlement process, and suggestions for new approaches to resettlement that better value the unique knowledge and skills brought by refugees from their home countries. The diligent work of Hmong interviewees to secure farming opportunities in Providence and exercise autonomy in their food choices and livelihoods, and the success they have had in doing so, demonstrates that interventionist, authoritative approaches to resettlement are not necessary in ensuring refugee wellbeing. Instead, considering cultural context and the particular knowledge of refugee communities may enrich the resettlement process both for refugees themselves and for the larger community. Second, a similar review will be presented regarding the United States' approach to nutrition education and promotion as it relates to refugee communities, and the negative health outcomes of dietary acculturation. This is a critical theme for this research, as the Hmong in Providence have demonstrated in this research that community-based, rather than interventionist, approaches to nutrition advice and dietary change may be the impetus for positive refugee health. Food sovereignty is a third topic of importance in the larger picture of my findings, as the Hmong in Providence provide insight into the benefits of local control over (at least some aspects of) food production; my findings also highlight needs cited by the Hmong farming community for greater realization of food sovereignty through access to more farming resources. Agroecology will be the final theme explored, as my findings demonstrate that Hmong farming techniques are largely aligned with the principles of agroecology; this is meaningful because the case of the Hmong in Providence provides support for the idea that drawing from traditional agricultural systems may aid research and community work in learning how to create more sustainable and resilient agroecological systems. Exploring agroecology also provides context for understanding the challenges regarding soil fertility and pest management still faced by Hmong growers in this context. Uniting these interdisciplinary themes is the common question of knowledge—of whose knowledge is valued and how new knowledge is formed to adapt and find solutions to contemporary issues such as farming sustainably with limited resources.

### **A. Resettlement, Acculturation and the Role of Knowledge**

First, foundational understanding of the outcomes and the role of knowledge in the resettlement process of the Hmong is important in order to understand the particular circumstances of their resettlement and to inform a primary question of this research—how the Hmong have adapted agriculturally to this context and what this adaptation means. The particular obstacles faced by the Hmong in their transition to American life, and the sorts of responses they encountered upon their arrival are important contextual details for grasping the scope of their adaptation, as American life is profoundly different from their past experiences in Southeast Asia not only ecologically, but also socially.

The negative outcomes of the United States' approach to the resettlement of the Southeast Asian refugees following the Vietnam War have been explored by many scholars (Mortland and Ledgerwood 1987; Yang 2001; Goodkind 2006; Franzen and Smith 2008; Goto et al. 2010; Vue, Wolff and Goto 2011; Westermeyer 2011; Lee and Green 2010). Mortland and Ledgerwood (1987) emphasize that the “scatter” approach to resettlement of the Southeast Asian refugees left the Hmong and other ethnic groups removed from social structures that would otherwise have aided their adaptive process;

thus, the Hmong self-initiated secondary migrations to be closer to kin and countrymen. Kou Yang (2001) explains that negative resettlement outcomes were magnified for the Hmong, considering their background as a pre-literate agrarian community and a minority group in Asia. Goodkind (2006) calls attention to the downfalls of US resettlement strategies, namely their failure to place the Hmong in situations where their social roles were meaningful. Consequently the Hmong experienced disproportionately high mental distress due to discrimination, marginalization, poverty, lack of community support, and lack of environmental mastery (Goodkind 2006). Franzen and Smith (2009) highlight that acculturation-driven changes in food behavior have led to increased incidence of diabetes, obesity and cancer in the Hmong community. Goto, Vue, Xiong and Wolff (2010) spoke with Hmong mothers who are concerned that changing eating habits, like increased meat consumption and snacking on unhealthy foods, are contributors to childhood obesity; they are concerned by the generational gap and the challenges of preserving traditional food culture but do not want to deny their children foods they are pressured to eat at school. Vue, Wolff and Goto (2011) find that, from the perspective of mothers interviewed, Hmong food culture represents their healthful lifestyle, self-identity, and social support. However they face great challenges in maintaining this food culture today, as generational tensions increase between the old who want to preserve tradition and the young who are becoming increasingly Americanized in many aspects, including their dietary preferences. Vue, Wolff, and Goto assess, echoing Goodkind's (2006) assessment, that "valuing the knowledge, culture, and experience of refugees and immigrants is crucial for promoting not only their wellbeing, but also the well-being of US society" (2011, p. 199).

### 1. Knowledge and power in the resettlement process: towards a mutual learning approach

There is much discussion focused on the push-and-pull that occurs in the medical realm in particular during the resettlement process, between practitioners and refugees, as Anne Fadiman chronicles in *The Spirit Catches You and You Fall Down* (1997). Aihwa Ong asserts that the refugee resettlement process presupposes refugees to a pathological image of the "contagious other," and mandates a series of "lessons" in what it means to be a "good" citizen. However, the themes of knowledge and power dynamics in the context of resettlement reach far beyond the medical context, raising questions of how knowledge held by refugee communities such as the Hmong is delegitimized in other areas of their resettlement process, such as their vocational knowledge and skills, and how individuals have been urged to rely on institutional authority rather than their own knowledge systems. This exploration of knowledge and power raises questions of how the process of refugee resettlement can shift in order to be more inclusive in terms of whose epistemologies are valued and how refugee knowledge might be valued and fostered rather than "processed out" (Goodkind 2006; Nibbs 2011). Exploring the power dynamics at play in the larger process of resettlement is an important line of inquiry for understanding how and why Hmong farming knowledge might be valued and fostered in the US in order to create a more empowering and autonomous experience of resettlement and beyond.

Several scholars express the need for equality in terms of power and knowledge in the resettlement experience; a more sophisticated, humanistic approach to refugee resettlement that emphasizes intercultural cooperation and knowledge sharing would be a positive start (Goodkind 2006, Westermeyer 2011). Jessica Goodkind (2006) points to

the particularly high mental distress experienced by the Hmong refugees as an indicator of the need for a new approach, arguing that a very difficult aspect of the refugee experience is that the “knowledge and experience of refugees from their former homeland often seems useless to them in their new country or seems unrecognized and invisible to others.” This is particularly relevant to the discussion of agricultural practice, as farming knowledge is not seen as a valuable vocational skill in the resettlement process. Goodkind asserts that the knowledge systems, culture, and social structure of refugee communities must be acknowledged and employed to shape efforts to assist them in their American integration, as “newcomers to the United States bring with them unique perspectives, skills, and traditions, which have the potential to make great contributions to our country” (p. 92).

A new approach to refugee resettlement and community support should, instead of focusing on “helping,” shift to an approach of “mutual learning” in order to “minimize power differentials” (Goodkind 2006, p. 90). A “mutual learning” approach should find “structural ways to incorporate refugees’ knowledge and skills into their communities, such as opportunities for refugees to share their cultures and experience” and more “holistic interventions that address material, social and educational needs and challenges of living in a new country” (Goodkind 2006, p. 91). Joseph Westermeyer (2011) suggests that a resettlement approach that takes cultural realities into account might foster “trust and integration, as opposed to mistrust and isolation,” although his goal still aligns with the standard US approach to resettlement that views secondary migration as a failure of the resettlement process, and thus views the Hmong community as an “acculturation failure.” Goodkind’s (2006) suggestions are more positive and progressive, melding with the perspective provided by Faith Nibbs (2011) in calling for an approach that acknowledges and legitimizes the unique knowledge, skills and experiences of refugees, suggesting that this kind of method might begin to counter the hegemonic presence of authoritative knowledge in the resettlement experience. Nibbs (2011) speaks of the role of authoritative knowledge in the process of “refugee reprogramming;” thinking about an approach that upholds diverse epistemologies calls into question how American communities might be “reprogrammed” to incorporate a wider range of knowledge, skills and experiences for the betterment of the whole community. The Hmong community in many ways asserts the legitimacy of their own knowledge through their lives in America and the cultural continuity that is evident in the findings of this research (which are to be explained in later chapters)—it is a matter of US agencies, communities, and government programs shifting their stance and opening up space for this knowledge to become visible and instrumental in the larger community. Recommendations for a “mutual learning” approach speak to my research questions of how the Hmong and their knowledge system might be better supported in Providence for the benefit of improved cultural persistence and agricultural practice. Such an approach will be discussed in a later chapter on suggestions for further support of the Hmong farming community, and examples of this kind of collaborative mutuality already occurring in Providence will be discussed as well.

## B. Nutrition Education and the Refugee Community

My interviewees’ reactions to the United States’ industrial food and farming system brought up many mentions of dietary changes through the resettlement process and their negative outcomes, as well as a return among many families to traditional Hmong diets for purposes of health and longevity. Findings of my research indicated a

great deal of agency within the Hmong community in Providence with regards to determining the best dietary practices for optimum health; these findings are counterintuitive to the way that nutrition education and promotion is generally conceived in the United States, especially as it relates to refugee communities, as an interventionist approach is often taken with the assumption that refugee communities need advice on their own health and food choices. Thus, an exploration of nutrition promotion and dietary acculturation speak to my question of how the Hmong have mobilized their own knowledge and traditions in response to the American food system in the process of adaptation.

### 1. The United States' approach to nutrition promotion

Nutrition advice in the US is streamlined through government-sponsored education initiatives such as the *MyPlate* and *Dietary Guidelines for Americans* developed by the USDA's Center for Nutrition Policy and Promotion (CNPP 2012). Government-sponsored nutrition guidelines reach refugee communities through educational programs aimed at communicating these guidelines for diet and physical activity with the intention of ensuring refugee health. Nutrition education proponents contend, “recent immigrants are unfamiliar with the opportunities and options for obtaining adequate nutrition and primary health care for maintaining their health status, and are less likely to receive timely and optimal health care” (Morrison et al. 2007). While there are true concerns about health in refugee communities, the processes and factors that contribute to illness and the proper responses to these issues are contentious. At the root of this contention are the questions of where knowledge about nutrition comes from, who has power in conceptualizing good nutrition, and how this knowledge should be communicated to the general public. My findings in the Providence Hmong community question the central assumption that refugee communities *need* (or even seek out) US-based nutrition advice.

J. Coveney (1999) and Melanie DuPuis (2002) argue that the Western knowledge system based in the scientific tradition and in Christian ideology constructs “good eaters” as not just healthy but morally correct, which Faith Nibbs (2011) explains is the driving ideology behind refugee health interventions—making sure that newcomers fit this desired state of correctness. Although early on the foundation of nutrition advice came from the Protestant ethic emphasizing “temperance and piety,” the powerful position of nutrition discourse as a shaper of “good” society and “good” bodies enabled later ideological manipulations in the media pushing capitalist consumption (p. 43). Thus, the modern framework for nutrition advice largely comes from a place of centralized power and ideology, paradoxically urging “good” eating through adherence to government-sanctioned advice such as “MyPlate,” while using the media and the farm subsidy system to make cheap, low quality food abundant (DuPuis 2002, Guthman 2008). Unfamiliarity surrounding both available foods and food advice creates a climate of confusion for refugees as they try to navigate a new way of living, eating, and nourishing their families in the context of a country that views food as a commodity rather than a source of nourishment.

### 2. Dietary acculturation and health issues in the Hmong community

Many scholars identify increased incidence of diabetes, obesity and cancer in the Hmong community as a result of “dietary acculturation,” although scholarly approaches

to this issue and the factors attributed are varied (Franzen and Smith 2009; Wieland et al. 2011; Goto et al. 2010; Vue, Wolff and Goto 2011). Franzen and Smith (2009) highlight the negative impacts of dietary acculturation among adult Hmong in the US, asserting that higher degrees of acculturation mean higher degrees of change in food behavior and preference. They identify food assistance programs and school lunch as catalysts in negative dietary change, as they expose the younger generation in particular to cheap, processed foods. They also highlight the influential role of “fad diets” such as the low-carbohydrate diet in steering Hmong youth away from the daily rice consumption that characterizes their traditional cuisine. Franzen and Smith’s (2009) assert that higher degrees of acculturation increase the degree of change in food preference—the young people are quicker to adopt the American diet and discard Hmong traditional foods and ways of preparing it.

Conflicting views of body image in Hmong versus American culture also influences dietary habits, especially for the younger Hmong who are heavily influenced by aforementioned fad diets and pressures to be thin (Franzen and Smith 2009; Vue, Wolff and Goto 2011). Traditionally the Hmong valued heavier bodies, as weight gain was associated with abundance and weight loss associated with food scarcity. American societal values around body image create confusion, and Wa Vue, Cindy Wolff, and Keiko Goto (2011) explained that in Hmong culture, “being big and bulky is a good thing.” They contend that, due to this cultural concept of the body, mothers were unlikely to be concerned when high consumption of fast foods and processed foods by their children led to weight gain and obesity upon resettlement in the United States. Mothers in this study voiced concern that their children were “having body issues because of what they see in society” and are “often afraid of eating too much for fear of becoming overweight” (p. 202). Lisa Franzen and Cheryl Smith (2009) also found in their work with Hmong women in St. Paul/ Minneapolis, Minnesota that the cultural preference for “plump” bodies was predominant and linked to past experiences with food shortage and survival rates. Making sure children reflected this cultural value was important to mothers; one interviewee explained, “having them [children] be healthy and big showed that you loved them” (p. 179). Thus, when children and adolescents worked to conform to American values surrounding body image, mothers felt that it reflected poorly on their parenting skills or sent the wrong message to other Hmong people in their community (Franzen and Smith 2009). Body image is not a topic I explored in this research, but it is an important part of the picture in understanding dietary acculturation and intergenerational tensions in the Hmong community.

Health as it relates to physical activity is also a challenging transitional area for refugees. Mark Wieland et al. (2011) assert that, “women often arrive to the United States without a framework for maintenance of fitness”; they take on more sedentary lifestyles coupled with higher calorie consumption and “often lack adaptive counterbalances to these societal norms, for example, regular cardiovascular exercise” (p. 229). They also state that “immigrant and refugee populations arrive to the U.S. healthier than the general population, but the longer they reside, the more they approximate the cardiovascular risk profiles of the country” (p. 225). My interviewees confirmed the findings of these studies, lamenting greater degrees of dietary acculturation among the young generation, decreased physical activity due to a livelihood shift from farming to factory work, and negative health outcomes resulting from the adoption of American dietary patterns.

### 3. Divergent conceptualizations of health: “We are out of balance”

Conceptualizations of the obstacles refugees face regarding health in the US are on one hand validated by refugees who voice concern about the overabundance of food in America, the accessibility of cheap food at all times of the day, the unfamiliarity of available foods, and the quick weight gain many experience in the US (Trapp 2010). Overconsumption of unhealthy foods and lack of physical activity are pinpointed as key areas of concern by US agencies, who link these issues directly with the increased incidence of diabetes, obesity, cancer and other illnesses among refugee communities (Wieland et al 2011; Barnes and Almasy 2005; Mulasi-Pokhriyal, Smith and Franzen-Castle 2011; Peterman 2011; Trapp 2010). On the other hand, communities and scholars contend that there is more to health than nutritional inputs; Micah Trapp (2010) raises the point that USDA dietary guidelines lack complexity in their approach; dietary behavior revolves around ethnocultural norms, socioeconomic status, political-economic processes, resettlement agencies, individual characteristics, and also the media, therefore outreach strategies focused on disease as the problem and dietary change as the solution lack effectiveness.

A study by Kathleen Culhane-Pera, Cheng Her and Bee Her (2007) illustrates the complexity of health for the Hmong in a significant way; the study found that the Hmong conceptualize their experience with diabetes as being “out of balance”; rather than seeing their illness as a mere dietary issue, the Hmong subjects of this study viewed their illness as a culmination of the refugee experience; “consuming sugar, salt, fat and chemicals and then not sweating them out of the body, combined with emotional losses of being refugees” along with not fitting with the “food, activity, weather, or community in the United States” leads to a feeling that they are out of balance, a much more complex conceptualization of health than the linear, pathologizing view taken by US agencies, where diet causes disease, and dietary change ensures health. My interviewees’ discussions of health supported the more holistic view of health as presented by Culhane-Pera, Her and Her, highlighting the multifaceted aspects of refugee health and the need for a non-linear, more culturally-conscious approach to health care for the Hmong and similar communities.

### 3. Knowledge and power in nutrition discourse

Supporting the idea that the Hmong conceptualize their illness differently than US dietary “experts” may, other scholars raise the issue of knowledge and power dynamics in the process of nutrition education (Guthman 2008 and 2011; Nibbs 2011; Coveney 1999; Ristovski-Slijepcevic, Chapman and Beagan 2010; Stevens 2010). J. Coveney (1999) explains that the conceptualization of nutrition by government-sponsored programs is highly scientific in its approach, emphasizing healthy eating as a scientific endeavor (2002). This dominance of scientific knowledge in the dominant nutrition discourse leads to discordance between nutrition advice and the cultural realities of refugee groups that nutrition interventions aim to reach (Culhane-Pera, Her, and Her 2007). Paul Stevens (2010) highlights that the dominant models of health view people as separable from their environment, constructing illness as a function of the individual as an isolated entity, in contrast to the view of health described by the Hmong in the above-mentioned study on diabetes as an imbalance of multiple environmental and internal factors (Culhane-Pera, Her and Her, 2007).

US nutrition “experts” perceive that *interventions* are necessary to bring the truth about nutrition to refugee communities and normalize their dietary behavior for the good of their own health and wellbeing, and in this way suggest that the nutrition advice comes from an authoritative knowledge source, namely Western scientific research, that holds more value than the traditional knowledge systems held by subjects of these health interventions (Nibbs 2011). Julie Guthman (2008) particularly interrogates the assumption that people would eat in a healthy way “if only they knew,” and that there is a responsibility for people who are in-the-know to share the truth about nutrition with communities and individuals who may not know how to take care of their bodies. Guthman challenges the “missionary impulses” enacted in alternative food spaces and practices such as the local and organic food movements, arguing that elitist knowledge surrounding food, typically coming from white upper-class consumers, is coded as white, creating a sense that those who “don’t know” are minorities and people of color. Her interrogations of these politics surrounding food and nutrition knowledge highlight the need to move away from the assumption that Western knowledge trumps other knowledge systems. Guthman (2011) pushes further to argue that health is a function of ecological and built-environmental conditions (and also our bodily ecologies that interact with these external ecologies), and that we must pay attention to the broader political-economic and cultural context in which decisions are made, keeping in mind “the role of corporate behavior, state regulation, and the political economy more generally in producing or allowing pollution, degraded food, and problematic built environments, irrespective of the ‘choices’ people make” (p. 9). This conceptualization of health comes a step closer to alignment with the Hmong conceptualization of diabetes as presented by Kathleen Culhane-Pera, Cheng Her and Bee Her (and also by my findings), that illness is the culmination of “not fitting” with the environment, including the foods, chemicals, weather, and community. A subject of their study recalled their healthful way of life in Laos in the following way (2007, p. 183):

*Coming here, the rice and vegetables that we eat are very salty and sweet and we have diabetes and hypertension. But we did not have these in Laos. In Laos, every morning, when the sun came, we did our daily tasks of chopping down trees and preparing the rice fields, climbing up hills and going down the valleys. Then, whatever you ate, whether it was fatty or salty, they all came out of your body, they did not stay inside of you and mix with your blood. That is why you didn't get sick...*

*When we lived in the mountains, or in the valleys, it is true that we suffered many hardships. However, we did not have this diabetes. Even when we cried up and down the valleys until we almost died (during the war and refugee flight), our bodily fluids were good. ... For some reason, when we came to this country, when our children were disobedient, we developed this diabetes. For others, when they experienced hardships such as when they were depressed from the loss of a child, they developed diabetes too.*

Rather than supporting refugee communities through this confusing time of navigating new territories and finding ways to gain balance and normalcy in their new

homes, resettlement and specifically nutrition programs aim to normalize refugee behavior by making it consistent with American societal ideals. Julie Guthman (2008) calls attention to “a set of norms of self-efficacy that some call healthism,” highlighting that such norms are “not universally shared.” She points out that these norms are often communicated with a “great deal of vehemence” but with a “lack of empathy,” illustrating “ethical lapses in thinking” revealing a divergence between health advice and true concern for wellbeing (p. 47). A more open consideration of the various forms of knowledge and sets of cultural norms related to nutrition and dietary preferences may mitigate some of these issues.

#### 4. New approaches to health: valuing knowledge, maintaining balance

Considering these concerns about knowledge and power in nutrition discourse, several scholars have called for different approaches to health promotion that incorporate multiple knowledge systems, a more holistic view of the factors contributing to illness, and the potential for knowledge-sharing and more open dialogues about being well (Culhane-Pera, Her, and Her 2007; Ristovski-Slijepcevic, Chapman, and Beagan 2010; Trapp 2010; Vue et al 2011; Guthman 2008). Kathleen Culhane-Pera, Cheng Her and Bee Her (2007) propose that health promoters and care providers could benefit from learning how the Hmong conceptualize illness in designing how to help the Hmong when illness happens, without assuming that interventions are inherently necessary and that Hmong are not aware of or concerned for their own health. Svetlana Ristovski-Slijepcevic, Gwen Chapman and Brenda Beagan (2010) contend, “parenting through food is not solely about abiding by governing nutrition-based knowledges, but also about maintaining home and community and showing love” (p. 480). Micah Trapp (2010) argues for a more dialogue-based approach to nutrition education, focusing on the experiences of refugees with food and their communities, calling for more integration of culturally appropriate foods and dietary practices into the discussion of nutrition.

These suggestions, while more inclusive than the approaches they critique, still don’t entirely move away from the interventionist approach that is seated in authoritative Western knowledge and arises from what Guthman (2008) calls “missionary impulses” that assume a need to “help.” Wa Vue, Cindy Wolff and Keiko Goto (2011) make a substantive point that preserving Hmong food culture through traditional food habits may contribute to prevention of obesity and associated health problems, an argument that legitimates the knowledge held by the Hmong regarding their bodies and their health. Guthman (2008) suggests, “Perhaps a place to start would be for whites to state how much they do not know to open up the space that might allow others to define the spaces and projects that will help spur the transformation to a more just and ecological way of providing food” (p. 395). The case of the Hmong in Providence demonstrates that health advice need not come from the outside; rather, the knowledge held by communities like the Hmong are well equipped to respond to ill health through dietary changes (based on their own culinary and agricultural traditions) and the use of herbal medicine.

The next section will explore how space might be opened up in the Hmong community for lifestyles that embody their own conceptualizations of health, namely a lifestyle based on growing culturally preferred foods and providing for their families in a way that may maintains “balance” through the continued practice of farming and increased autonomy in the area of food access and production.

### C. Food Sovereignty in the US: Possibilities for the Hmong Community

Findings of this research demonstrate that, for Hmong farmers in Providence, having control over where their food comes from, being able to grow culturally preferred varieties, and having the option of produce that is more affordable than what is found in the supermarket and, importantly, not grown with chemicals are important drivers of continued agricultural practice, not to mention the role of farming in Hmong cultural persistence. The concept of “food sovereignty” addresses the desire of smallholder farmers and communities to have control over their food futures, speaking directly to my findings and my question of what agricultural adaptation means for the Hmong.

This concept arose through the work of the global small farmer and peasant network Via Campesina as a framework for action that asserts “the right of each nation to maintain and develop its own capacity to produce its basic foods, respecting cultural and productive capacity” (Gottlieb and Joshi 2010: 116; Via Campesina 1996). It demands that people have the right “to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems” (Via Campesina 2011). Food sovereignty has grown into an international movement, and much of the agency of the movement lies with the peasants and smallholder farmers who are the holders of traditional agricultural knowledge in developing countries; they have formed this movement with notable emphasis on the rights of women, indigenous people, and racial minorities (Wittman, Desmarais and Wiebe 2010; Alkon and Mares 2011). Food sovereignty also addresses larger structural issues of governance and agriculture, targeting the “base inequality in power” connected to the current food system through a call for “peoples’ rights to shape and craft food policy” (Patel 2010, p. 186; Patel 2009, p. 663). According to Philip McMichael (2005), food sovereignty is a direct countermovement to the corporate food regime and its focus on foods as commodities that are subject to free market speculation. As the food sovereignty emerged in an international context, scholars seek to explore how this concept is embodied in US communities, and how it might be fostered.

My findings demonstrate that the Hmong in Providence both have a great desire to control at least some aspects of their food access, and have made the adaptations necessary to make this possible, although there are still challenges to realizing food sovereignty in this context. What food sovereignty means in the context of US agri-food movements, and more specifically for refugee communities and the Hmong in particular, will be explored here. First, brief background on US agri-food movements is necessary to understand the continuum of efforts to mitigate the ill effects of the industrial agri-food system.

#### 1. Existing US agri-food movements: community food security and food justice

Existing US agri-food movements are built on the concepts of community food security and food justice. Community food security (CFS) is defined as “all persons obtaining, at all times, a culturally acceptable, nutritionally adequate diet through local, non-emergency sources” (Gottlieb and Fisher 1995). Advocates for CFS stress the need for “sustainable solutions to hunger at the community level and work to empower communities to become self-reliant in food” (Fairbairn 2012, p. 222). The main critique of this approach is its focus on community-level change, without attention to the larger policies and structures that render food systems unjust (Wekerle 2004).

Expanding upon the work of CFS, food justice activists “emphasize the role of the built environment and longstanding patterns of racial and class-based inequalities in producing inadequate access to healthy food” (Alkon and Mares 2011, p. 350). Thus far these movements have been unsuccessful in moving beyond market-based responses, thus reproducing neoliberalism in their responses, often leading to a shift of what were formerly state responsibilities to individuals and market mechanisms (Guthman 2008).

An approach that takes into account the diverse agricultural and culinary knowledge systems held by individuals and communities, considers the structures of racial and class inequalities, and creates alternatives that challenge structural inequalities in agri-food policy and governance is needed; the food sovereignty approach aims to meet that need.

## 2. Embodiment of food sovereignty in US agri-food movements

Responding to the idea that food sovereignty may be able to build upon current food justice and community food security work in a way that is more transformative, Allison Alkon and Teresa Mares (2011) review two community food security and food justice projects in Seattle, investigating the extent to which these projects embody a food sovereignty framework. They highlight that there is much overlap between the three approaches, namely local production and consumption as well as local control over agriculture and food systems. However, they stress that “only a food sovereignty framework explicitly underscores direct opposition to the corporate food regime” (p. 347). The authors found that great strides were being made in the area of local control over agri-food systems in these two projects, however they failed to move beyond a market response to food system inequality, and also (inadvertently) marginalized the agroecological knowledge of immigrant communities, rendering non-profit efforts ineffective and exclusive. The authors suggest that local food movements, by engaging fully with the concept of food sovereignty, may “help others to understand the limits of market-based approaches and to push for something more radical and transformative” (Alkon and Mares 2011, p. 358). Madeleine Fairbairn (2012) also examines the potential of a food sovereignty approach in the US context, emphasizing that advocates should guide the reframing of food sovereignty to this context in such a way that it is constructed as “a valuable counter-hegemonic vision to complement the more pragmatic and locally-grounded work of community food security advocates” (p. 227). If reframed in this way, it does seem to have transformative possibilities beyond those of existing US agri-food frames (p. 228).

Alkon and Mares (2011) argue that there are ways to lay the foundation for an approach that moves towards truly opposing the corporate food regime and its unjust outcomes, including: empowerment and provision of supplies for communities wanting to grow their own food and “attention to the diverse agri-food knowledge of immigrant communities” such as linking them with necessary land and tools (p. 358). A true food sovereignty approach, they argue, would “use these projects and relationships to...mobilize for a broad-based transformation of the corporate food regime” (p. 358). This would necessitate “reaching beyond the framework of ‘cultural appropriateness’ to consider the cultural importance of food in sustaining social relationships,” an approach that may help “transform the food system into one built on foundations of ecological production, community control, and the multiple meanings of justice” (Alkon and Mares 2011; p. 358). My findings demonstrate that the foundation for a true food sovereignty

approach is being laid by the Hmong farming community and its supporters in Providence, Rhode Island through the provision of supplies and through programs that link growers with land.

Fairbairn (2012) reasons that food sovereignty could move US food movements beyond “elitist healthism,” as this concept is “far richer, and more enriching, than an ethical form of hedonism for those able to afford it,” which suggests a potentially transformative role of food sovereignty in the previous discussion on integrating multiple epistemologies into nutrition promotion (p. 227). My findings support Fairbairn’s proposed link between food sovereignty and an inclusive, multi-epistemological approach to nutrition.

### 3. Food sovereignty and its role in refugee resettlement and nutrition promotion

The arguments for food sovereignty as a transformative frame for US agri-food movements may link naturally with calls for transformation of the refugee resettlement process and the way in which we promote nutrition in the US, as outlined previously. All three call for the integration of diverse epistemologies and a community-driven approach; Jessica Goodkind’s (2006) call for a “mutual learning” approach that may “minimize power differentials” resonates with Julie Guthmans’ urging for whites to step back and “open up the space that might allow others to define the spaces and projects that will help spur the transformation to a more just and ecological way of providing food” (p. 395). Alkon’s and Mares’ (2011) point that food sovereignty in the US context is about mobilizing for a “broad-based transformation of the corporate food regime” positions food sovereignty as a potential (and partial) answer to Nibbs’ (2011) concern about authoritative knowledge and its role in undermining traditional knowledge in the refugee resettlement process. Through a true food sovereignty approach, traditional knowledge systems are uplifted while authoritative knowledge is countered and challenged.

Fairbairn’s (2012) idea that food sovereignty is “more enriching...than an ethical form of hedonism for those able to afford it” speaks to Guthman’s (2008; 2011) concerns about the elitist healthism of US nutrition discourse. As I have found in the Hmong community in Providence, dietary choices have arisen not from nutrition programs but from the inherent knowledge held by the Hmong, as they shift their diets back to traditional, vegetable-rich diets after negative outcomes of the adoption of more Americanized diets. The traditional crops that the Hmong choose to grow inform and enable their healthy food choices. Food sovereignty, then, might create space for communities to determine their own ideal diets as they grow the culturally important foods they desire to consume and share with their families and neighbors. The ability to grow their own food has certainly been helpful for key informants in this research, enabling their return to Hmong dietary patterns in response to ill effects of American diets. Ideas of health and diet that were raised through this research will be discussed in greater detail in the later chapter on Hmong reactions to US food and farming.

### 4. Embodiment of food sovereignty in the Providence, RI Hmong community

The ways in which food sovereignty is relevant to and may be embodied in the Hmong farming community in Providence is worth deep exploration. One may characterize current work in the Hmong community and by groups such as SCLT as fitting more with the community food security or food justice frame, in that the work is largely about community and household-level control over food production to ensure

access to preferred foods and persistence of culture. However Alkon's and Mares' (2011) description of the foundation for a food sovereignty framework can be seen in the Hmong farming community in the greater Providence area. They argue that empowering communities with diverse epistemologies and deep "agroecological" knowledge (which will be defined and discussed in the next section) lays the foundation for a food sovereignty approach. This empowerment may occur through "attention to the diverse agri-food knowledges of immigrant communities" which "might further foster efforts to match new immigrants with the land and tools they would need to cultivate food." The empowerment of "diverse agri-food knowledges" can be seen in SCLT's work to connect the Hmong and other immigrant groups to land and tools at community gardens and at the Urban Edge Farm—initiatives that will be discussed in greater detail in a later chapter on agricultural practice. The "cultural importance of food in sustaining social relationships" (Alkon and Mares 2011) can be seen in at the Broad Street Farmer's Market where three generations of Hmong gather weekly throughout the growing season to socialize and share food, and at the Hmong Community Farm in Scituate where community members and family share their seeds and lend their hands in continuing to produce traditional crops that sustain their families throughout the year.

However, as Alkon and Mares (2011) as well as Fairbairn (2012) stress, this local-level initiatives cannot be substitutes for the state in the provision of basic services; many existing local food projects, Alkon and Mares (2011) note, "easily coexist with industrial agriculture, and even in some ways relieve the state of its duty to provide basic services" rather than truly challenging the neoliberal political economy (p. 348). They argue that a true food sovereignty approach must find ways to counter and speak out against the neoliberal forces that continue to render farmland and healthy food largely inaccessible to low-income and minority communities; after all, Southside Community Land Trust is largely run by white community members who do not live in the neighborhoods they predominantly work with. Beyond the community garden plots and peri-urban space made available through SCLT and the Scituate farm that the Hmong have secured a lease to, the Hmong struggle to gain access to more land. The pathways of access are still located outside of the Hmong community, and the important work of SCLT and the Hmong community still remains localized rather than challenging the larger-scale, systematic injustices that a true food sovereignty approach aims to question. How local agri-food movements might effectively challenge these neoliberal structures remains a question, but work done by Via Campesina and other international groups through the food sovereignty approach may provide valuable insight into moving beyond the local and market-based focuses of community food security and food justice movements. Encouragingly, the foundation for a true food sovereignty approach as outlined by Alkon and Mares (2011) can be seen in the Hmong farming community in and around Providence, which will be discussed in greater detail in a later chapter on agricultural practice.

#### **D. Agroecology in practice: why value Hmong farming knowledge?**

Alkon and Mares (2011) stated that an essential step towards realizing food sovereignty is to empower communities with deep agroecological knowledge and diverse epistemologies—the Hmong farming community is a unique example of one such community. My participant observation at Hmong garden and farm sites indicated that Hmong farming practice are in many ways aligned with the core principles of

agroecology (Altieri 1987); these alignments are demonstrated in a table in the Appendix and also described in a later chapter on Hmong farming practices. Understanding agroecology and its principles helps explain why it is important to learn from traditional farming systems like that of the Hmong, and provides depth to my inquiry of the specific techniques and adaptive strategies of Hmong farmers in Providence. This section will review the meaning of agroecology and the role of traditional knowledge in agroecological research and practice, which will clarify the importance of empowering and providing space for the continuation of traditional Hmong agricultural knowledge in Providence, along with increased knowledge sharing across the various farming cultures represented in Providence.

### 1. Agroecology and traditional knowledge

Agroecology, or the study of ecological agricultural production, is “grounded in knowledge systems that integrate science and research, practice and experience, and the need for social change that brings justice and equity to our food systems” (Gliessman 2012). Concerns over environmental degradation and other externalities of the industrial agri-food system have led to heightened interest in agroecology, with much of the focus turned towards traditional or indigenous agricultural knowledge systems as sources of more resilient forms of food production. Traditional knowledge systems may be defined in a variety of ways, but essentially are based on “cultural continuity transmitted in the form of social attitudes, beliefs, principles, and conventions of behavior and practice derived from historical experience” (Berkes 2012, p. 3). These knowledge systems are not static, rather they constitute “enduring adaptations to specific places” and are “cumulative and open to change” (Berkes 2012, p. 3-4). Because they have “stood the test of time,” traditional agro-ecosystems “may represent signposts along the road to an ecological agriculture” (Perfecto, Vandermeer and Wright 2009: 63). In contrast to industrialized agriculture, these traditional systems are “microcosms of agricultural heritage” that provide “cultural and ecological services to rural inhabitants” and are “much more innovative than many agriculturalists believe” (Altieri and Nicholls 2005: 73; Altieri 1987: 107).

The complexity of local-scale traditional farming systems and their ability to preserve biodiversity, resist disease, adapt to local conditions, minimize risk, meet subsistence needs, and promote dietary diversity without relying on chemical or mechanical inputs has sparked scholarly interest in how to apply these knowledge systems elsewhere in order to address environmental, human health, and social ills associated with industrial agriculture (Altieri 1987, 2004, 2009; Innis 1997). Many scientists have turned towards traditional small-scale mixed crop systems in their search for “ways to remedy deficiencies in modern agriculture” (Altieri 1987: 107; Gliessman 1990). Indigenous agricultural methods “developed gradually over periods of thousands of years, have produced methods of growing crops which use resources more wisely in the short run and more profitably in the long run” compared to modern systems (Innis 1997, p. 1). Intercropping is a central component of Hmong farming practice observed in this research and supported by other researchers (Corlett 1999, 2003; De Master 2003). Donald Innis (1997:3) notes that intercropping “very common and extremely sophisticated within traditional cultures,” and has been scientifically shown to produce a greater yield of organic matter than monocropping, while adding nitrogen rather than depleting the soil. Literature has also suggested that studying traditional agroecosystems

can deepen ecological theory by providing insight on the complex interactions within these systems (Altieri 1987, 2004).

Miguel Altieri (1987) raises the point that simply growing in ways that use traditional agricultural methods will not achieve community sustainability, and these traditional systems should not be romanticized or deemed perfect. Therefore, it is important not to assume any one knowledge system complete; rather, exchanging knowledge among growers of many different traditions in order to value the strengths and fill in the gaps of each is a positive goal.

## 2. Social and cultural embeddedness of traditional agroecosystems

There exists great possibility for integrating traditional agricultural knowledge systems into US-based farming communities, as long as efforts to do so acknowledge that traditional agriculture systems are multidimensional; coupled with ecological management principles is the socio-cultural embeddedness of agricultural practice—the rituals, folklore, and ceremonies that support the management of agro-ecosystems (Altieri 1987). For the Hmong in Providence, farming practice, agricultural practice is not only about food but about knowing one's cultural roots, continuing the knowledge passed down from one's parents and generations before, providing culturally preferred foods, maintaining health, and fulfilling Hmong cultural imperatives of hard work and self sufficiency—all of which will be further explored in the forthcoming chapters. Thus, the challenge for research and practice is to take an approach that reflects “the nature of agriculture as the coevolution between culture and environment” (Gliessman 1990).

My findings demonstrate this point clearly by detailing how the Hmong have adapted their farming practice to the Providence context, and how so many other aspects of life are interwoven with the practice of farming—agricultural persistence is not only about food for the Hmong in Providence, but about knowing one's roots, keeping alive knowledge that has been passed down from previous generations, providing culturally preferred foods to one's family, maintaining health, and supporting Hmong values of hard work and self sufficiency—not to mention pure enjoyment. As a culture with a deeply embedded agricultural tradition, the Hmong farming community in Providence may be looked upon to see what this kind of “coevolution between culture and environment” looks like.

## 3. Adaptive capabilities of traditional agroecosystems

In addition to the social and cultural embeddedness of traditional agriculture, it is critical to highlight the transitory and adaptive nature of these knowledge systems, as is also seen in the case of Hmong farmers in Providence—without adaptive capabilities, farming in such a different social and environmental context would not be possible. Literature notes that traditional systems of practice are not static—in fact, they are developed through the “selection of the most adaptive or useful information” and these adaptive processes are “passed down from generation to generation; not only are these systems adaptable to changing agroecological circumstances, but socioeconomic ones, too (Altieri and Nicholls 2005: 78, 89). This notion of adaptability is true not only for agricultural knowledge but also for indigenous and traditional knowledge in general—James Clifford (2007) describes the diasporic experience of indigenous peoples as a continuum involving both adaptation and a strong sense of identity—a description that aptly describes the Hmong of Providence, who have shaped their farming practice to fit

the challenges of their new home while still upholding its characteristic techniques and crops, and while continuing to hold farming as a defining practice in their lives despite increased assimilation into modern, technology-driven life.

This ability to sustain identity through the maintenance of resilient, adaptive, ecologically sound agriculture systems points to the importance of learning from the Hmong and other immigrant groups in urban spaces who may contribute important knowledge to moves towards just and sustainable food systems. John Vandermeer and Ivette Perfecto (2013) cite the Levins paradox (Lewontin and Levins 2007), that traditional knowledge is deep but narrow while modern ecological knowledge is broad but shallow, and they raise the question of how to “creatively engage” this paradox in order to build a modern ecological and agricultural knowledge base that is “simultaneously deep and general,” drawing from and valuing multiple epistemologies in a mutually beneficial way (p. 86). Agroecology, they contend, is the tool that can fill in the gaps in understanding and make the realization of food sovereignty possible. They highlight farmer-to-farmer exchange as “an important social tool” in this process, aligning with previous discussions of a move towards a an approach based on knowledge-sharing and mutuality spanning the arenas of resettlement, nutrition discourse, and agricultural adaptation. The next chapter will exemplify in greater detail the richness of Hmong agricultural knowledge and its myriad contributions to the Providence community.

## V. HMONG FARMING IN PROVIDENCE: TECHNIQUES, ADAPTATIONS, AND CHALLENGES FACED BY SUBSISTENCE AND MARKET GROWERS

“What do you want to know?” Chang Xiong asked me as I timidly entered the greenhouse on my first visit to her farm, Pak Express, in Cranston, Rhode Island. I was hesitant to intrude on her busy schedule, sensing that my presence was an inconvenience, that she didn’t have the time to answer my questions. She busily transplanted hundreds of lettuce seedlings and told me to have a look around until she finished. Once her newly seeded trays were stowed under the benches to protect the cool weather crops from the direct heat of the sun, I followed her as we drove down a winding dirt road, away from the communal space devoted to Urban Edge Farm’s beginning farmer training program, and onto the two acres she leases from Southside Community Land Trust as an independent grower. She gave me the basic tour of her 2-acre farm, with its rows upon rows of a variety of greens, cabbage, eggplant, melon, tomatoes and other crops. Chang’s straight-to-the-point way of communicating and her professional demeanor told me that she is a savvy businesswoman, and her array of healthy, vivacious crops made it clear that she is, just as every Hmong grower I have met through this work, a highly productive farmer. I was eager to hear Chang’s story, to find out how she learned to farm like this and how she built her business in the US, far from the social, economic and environmental contexts of her home country of Laos. However I was unsure of how to break through the initial awkward feeling that comes with being a researcher who is imposing on others’ obviously busy schedules.

The breakthrough came when I expressed to Chang my growing passion for farming and my active, although amateur, involvement in community gardening. I told her that I want to be a farmer, and her face lit up. “You want to farm? You like getting dirty? You’re not scared of bugs?” She fired these questions at me, astonished that a member of my generation of American youth was interested in farming as a livelihood<sup>12</sup>. She warmed to me even more when we shared with each other our tendencies to talk to our plants as we work with them, and our shared belief that it encourages them to grow better. She threw her head back and her laughter rang out across the field as we shared our like-mindedness on this issue, carefully treading through rows of hundreds of heirloom tomato plants. Chang and her husband George became regular fixtures in my life when Chang told me, “It is the responsibility of the older people to teach the young people to farm. Whatever you want to know, I teach you.” Carrying on the Hmong tradition of passing knowledge along to the young, Chang and George have been invaluable mentors for me during this project. We have spent much time together in the fields, harvesting beets, eggplant, carrots, sweet potatoes and greens as they have generously shared with me their stories, knowledge, and advice on growing well and living well.

My findings indicate that, through a deep knowledge of growing and through a great amount of knowledge exchange upon arrival in the United States surrounding agriculture in this context, incredible ecological adaptations been achieved in the Hmong farming community, enabling a knowledge system that evolved in the tropical context of

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<sup>12</sup> Few Hmong youth are interested in farming, especially as a business; a later chapter will detail the intergenerational differences in farming practices and perceptions among the Hmong community in Providence.

Southeast Asia to be transplanted to this New England city (and many other areas in the United States as demonstrated by Corlett 1999, De Master 2003, and Brady 2011). This chapter will review growing methods and techniques demonstrated by Hmong growers that I observed during participant observation, as well as common patterns in agricultural practice that I observed across different research sites. It will include species grown and their purposes, culinary and medicinal, as well as typical inter-planting combinations and example garden maps. Knowledge and resource sharing in agricultural practice will be explored, both within the Hmong community and among other cultures that come together at Providence community gardens and farmers markets. Finally, challenges faced by Hmong farmers in the greater Providence area will be discussed. These findings will provide detail on the progression of Hmong agricultural adaptation and the challenges still faced in this ongoing process.

### A. Hmong farming techniques and patterns observed

From my observations at the Hmong Community Farm, Pak Express Farm, Xiong Farms, and community garden sites, I have learned that a Hmong garden plot is easy to spot. Phillip Yang pointed out the distinctiveness of the Hmong growing style during my first visit to Glenham Street garden, noting with pride the difference in productivity and diversity between his people's plots and those of other ethnic groups with less traditional knowledge around growing food. He stressed the "careful planning" that goes into their plots in order to produce such diversity and yield such success (personal communication with Phillip Yang).

A vivid combination of colors and textures is achieved through intercropping and intensive planting. Bare soil can rarely be seen. The broad palmate leaves of squash and pumpkin creates a carpet from which elongated leaves of lemongrass and rice emerge. Hints of purple on the leaves of kale and mustard greens deepen and diversify the color palette, while the tiny yellow flowers of the mustard greens create a delicate but stunning contrast. The small, round fruits of the bitter, spiny eggplant or "bitter ball," along with the slender fruits of the chili pepper dot the garden scape with bursts of warmth. Breathe deeply and the smell of cilantro, lemongrass, and the upturned earth invites a feeling of calm. Emerging from the green understory are stalks of corn and vines of long purple beans and lumpy bitter melon, maybe growing up cornstalks or a hand-built fence, or



Intercropping in a Glenham Street garden plot, tended by a Hmong family, August 2012.

possibly twining up a trellis cleverly assembled from tree branches. In Hmong-tended community gardens of Madison, WI, Kathryn De Master (2003 p. 69) observed, "Boundaries of plots are distinguished

by...living fences." The same was observed in Providence community gardens—the mismatched assortment of fencing material forming the garden infrastructure and delineating individual plots is brought to life by climbing, twining, edible plants like bitter melon, long beans, cucumbers, and winter gourds. These multiple levels of growth remind one of "a natural ecosystem" where "there are many different plants holding their leaves at different levels and angles to catch solar energy" so that "the plants together use a great deal more solar energy than any one species could use" and in that way produce more organic matter (Innis 1997, p. 102). With wise use of space and careful attention to the ongoing productivity and resourcefulness of garden space, the common goal, as Mr. Yang articulated at the Glenham Street garden, is to produce as much food as possible, for as little money as possible, on a small amount of land (personal communication with Phillip Yang). Notably, the findings of this research demonstrate that Hmong farming techniques employed in Providence are largely aligned with principles of agroecology; these consistencies will be detailed in the conclusion to this section and are presented in a table in the Appendix.

### 1. Intercropping<sup>13</sup>

Without neat rows and segregation of crops this planting method may appear haphazard to some eyes, but upon closer observation it is clear that plants thrive in the diverse and balanced ecosystems created by intercropping. Intercropping "is very common and extremely sophisticated within traditional cultures" and when done intelligently can "produce a greater yield of organic matter, or food, than monocropping can" (Innis 1997, p. 3). Additionally it "uses environmental and other resources more efficiently than does monocropping" and "can maintain soil quality...more or less indefinitely" (Innis 1997, p. 2 & p. 102).



A grower tends her garden plot at the Glenham St. community garden in early fall 2012.

At observed Hmong garden sites there is little pest interference, and species diversity through intercropping techniques helped keep periodic pest outbreaks contained to small spaces. Some weeds were permitted to grow but did not dominate food crops, and were said to assist crops and soil as living mulch, helping the soil retain moisture and structure (personal communication with Chang Xiong and Kia Yang).

<sup>13</sup> Two sample garden plot maps, one from the Glenham Street Garden and one of the Hmong Community Farm, are provided in the Appendix and demonstrate the intercropping and species diversity characteristic of Hmong growing techniques.

At the Glenham Street community garden it is easy to point out the plots maintained by non-Hmong people. They are not poorly tended, but different and often with less diversity per plot, and the Hmong are full of pride for the uniquely diverse and abundant gardens that embody their farming tradition. Even in large fields of corn, soybeans, or rice found at the Hmong Community Farm, one may find squash, beans, eggplant, mustard greens, or a number of other crops growing alongside the predominant crop. As farm work is mostly manual in the Hmong community (a few people have tillers but no large tractors), growers are able to plant more intensively without leaving wide rows for machines to move through (personal communication with Phillip Yang). Although this necessitates more time and energy devoted to manual work, it does allow for more intensive intercropping and maximization of limited space.

## 2. Successive plantings

In addition to intensive intercropping, the Hmong growers observed make the most of the short growing season and maintain the impressive bounty of their gardens throughout the season by planting early in the spring and late into the fall. This observation is consistent with Kathryn De Master's finding that Hmong gardeners in Madison, Wisconsin "aim to harvest crops throughout the spring, summer, and fall months, rather than emphasizing only peak summer months, thereby maximizing their overall yield" (2003, p. 63). They may lose seeds in the first round of planting if the cold returns, but they take the risk and generally are able to plant four rounds of crops throughout the season, successively planting crops that have a short maturation period like greens and herbs. At the end of the season, Vue Yang puts parsley and cilantro seeds in the ground, as she usually has luck with these seeds sprouting early in spring, giving her a head start on the season (personal communication with Vue Yang). This method requires careful planning and close attention to planting and harvesting times, which the Hmong have had to learn through trial and error and through sharing knowledge with other members of the community in this new and different climate. While more work is required, greater and more diverse harvests abound. At Xiong Farms, Charlie Xiong has different fields dedicated to spring, summer and fall crops so that, as each round of crops mature, he can be preparing the next field for planting; this technique also ensures that the soil lies fallow for an adequate part of the year (personal communication with Charlie Xiong).

## 3. Soil fertility maintenance

Maintaining the fertility of one plot of land from season to season was cited as a major challenge by many Hmong growers, which is no surprise with their history as a migratory culture and consequential "swidden" agriculture technique involving moving from place to place, burning and clearing new plots of land, and farming chosen plots for only five to ten years at a time.

In urban community gardens SCLT provides compost and teaches new growers how to use it. Garden leaders help ensure that compost is used by all growers in order to maintain the health of these urban ecosystems year after year, and Hmong growers noted the use of compost as a major difference in their garden practice here versus back in Laos; they did not need compost in Laos—the soil was already good, and after five or ten years they would migrate anyway. Thus, the consideration of soil fertility is new for many growers:

In here you have to put more work to them, to the vegetables, to the garden. Pick all the weeds out, put the new compost every time you grow, and it's harder...the first time I don't know how to do. (Interview with Kia Yang)

Over there [in Laos] you don't have to put any chemicals or like compost, fertilizer, all that spray for bugs, like that. (Interview with Charlie Xiong)

Synthetic fertilizers are against community garden regulations, so SCLT leads demonstrations on using compost for the soil and on using fish emulsion as an organic fertilizer spray for crops. At the fish emulsion demonstration led by SCLT, Hmong garden leaders Chee Moua and Phillip Yang helped communicate the purpose and the process to growers. Kia Yang told me after the demonstration: "I'll buy the 'fishemo' so I can learn how to use that in my garden and at my house because I want to learn something new, how to grow."

With the idea of supplementing soil fertility being in itself a foreign concept, the use of synthetic versus organic fertilizers can be confusing for growers, especially the elderly who do not speak English. At the farm and at private sites tended by the older Hmong generation, chemical fertilizers and pesticides are often used because, as Wang Yang and Phillip Yang explained, they are seen as necessary for "boosting up the plants so they grow faster" in this shortened growing season, and knowledge around availability and use of organic alternatives is lacking among the older generation in particular. Charlie Xiong of Xiong Farms, through the Urban Edge Farm training program, became educated in the use of organic fertilizers and where to access these alternatives:

We learn about put the spray but we only use the organic one... I think the one that you put the chemical is very dangerous for the health. For our people, the grower...I don't like to do the chemicals. Too dangerous. The one that organic very easy! But very hard to find the organic spray, you have to order it.  
(Interview with Charlie Xiong)

Mr. Xiong explains that, in the last few years, organic alternatives to synthetic fertilizers have become much more widely available in home and garden stores, but they can be expensive (Interview with Charlie Xiong). The price and previous unavailability of these alternatives may have hampered their use by independent growers. According to Mee and Wang Yang, "the fertilizer and these pesticides and chemicals, it's good to keep [pests] away from the vegetables and from the plants, but in the long run it's not good for you" (Interview with Mee and Wang Yang). However alternatives are unclear, so synthetic fertilizers and pesticides, which are widely available, are frequently used by members of the older generation (personal communication with Phillip Yang, Chang Xiong, and Kia Yang).

On the other hand, many natural forms of soil fertility management inherent to Hmong agricultural tradition are practiced, including and in addition to intercropping, as previously described. In the West, crop rotation is a common method of ensuring soil fertility year after year, widely practiced by diversified growers involving careful planning in consideration of the balance between heavy feeding crops and heavy giving

or nitrogen-fixing crops (Jeavons 2012). Hmong growers find that intensive intercropping often negates the need for careful crop rotation. At the Hmong Community Farm, crop rotation is not practiced in an organized fashion. Family plots are rotated each season as new families join or old families leave, and the size and shape of assigned plots shifts each year as the number of farmers change—this way equity is ensured. With this system careful crop rotation is virtually impossible and, Phillip Yang suggests, not necessary. When families change plots they sometimes ask or remember which crops were planted in their space during the previous year and try to rotate based on that knowledge, being careful not to plant soybeans in the same place two years in a row since typically no other crops are interplanted with their soybeans. They do not find a challenge with planting corn in the same space in subsequent years, and this may be due to the intercropping practice that ensures the nutrients taken up by the corn are replaced by other crops (personal communication with Phillip Yang). At the farm, corn was observed growing with many different species such as beans, squash, mustard greens, and eggplant.

At Pak Express Farm crop rotation is not practiced, but the Xiong's manage soil fertility by leaving organic matter such as carrot tops, beet greens, watermelon rinds and cucumber skins in the fields after harvesting (or after an afternoon watermelon feast by the shed). Some weeds are also allowed to grow in the soil that is not being used for crops (such as row paths), or in the soil surrounding well-established crops, in order to prevent soil erosion, retain moisture, and keep the soil full of necessary insect and microbial activity. Charlie Xiong of Xiong Farms takes a similar approach, leaving organic matter in the fields and also dividing his land up into separate fields for spring, summer and fall crops; this way portions of his land are left fallow during each season. Both farms also use compost, as suggested during their Urban Edge Farm training program.

#### 4. Species diversity

In her observation of Hmong women gardeners in Sacramento County, CA, Jan Corlett (1999) found that “Crops were selected based on familiarity, and seeds and cuttings were freely shared among the women. The Hmong women preferred crops they had known in Laos and Thailand.”

Observations in Providence were largely consistent with this finding—food and medicinal crops were mostly traditional crops grown in Laos, with seeds that were originally brought over from Laos or purchased through Asian markets.

Some variation occurred with people of the younger generation who have more Americanized diets, and among market growers who have integrated popular American vegetables into their selection



Bitter melon growing at Glenham Street community garden, August 2012.

in order to attract and please American consumers. Market growers have also integrated different crops to cater to the large African community in Providence.

### *Food Crops*<sup>14</sup>

The range of traditional crops that Hmong farmers continue to grow in Providence is remarkable, considering their tropical origin and the challenges created by the cooler weather and shorter growing season characteristic of New England. At Xiong Farms, Charlie Xiong grows almost 100 varieties of crops, ranging from traditional foods like sugarcane and sticky corn to popular American crops like asparagus and rhubarb—he says that he has a list of his crops from A to Z, with a variety for almost every letter. Food crops grown vary according to location, purpose, and personal preference. Crops found in backyard gardens, community gardens, and farm plots often vary for strategic purposes. At home and at the community garden, plants that need lots of water like greens, cucumbers, squash, and herbs are grown abundantly. In backyard gardens and in pots on porches families also grow medicinal herbs for quick access. Greens and herbs like mustard and cilantro that are continually harvested are also typically grown closer to home so that they are easily accessible for everyday use. At the farm where there is more space, crops like rice, corn, soybeans, and pumpkins that demand more space are widely grown. Drought tolerance is also important at the Hmong Community Farm where irrigation “depends on Mother Nature,” so greens like water spinach, lettuce, mustard, cilantro, and mint are not as common. Some growers used black plastic to help retain moisture for crops like cucumbers and squash at the Hmong Community Farm. Growers also adapt to this climate by growing varieties of traditional crops that have shorter growing seasons, to ensure full maturation and to lessen the risk of the crop being lost to a frost in late spring or early fall. Rice is one such crop; Charlie Xiong explained that, unlike back in Laos, they must grow only sticky, black, and purple rice varieties that have a shorter growing season rather than the long grain rice that takes more time to mature. This is also true for sugarcane; however, in the case of this crop, the traditional highland variety of sugarcane that demands less heat and humidity tends to grow well in Providence (personal communication with Charlie Xiong).

The variety of food crops grown by the Hmong help support their continued culinary traditions and Hmong dietary choices, a finding indicated by my research and supported by other studies involving Hmong gardeners in Wisconsin, California, and Alaska (De Master 2003; Corlett 1999, 2003; Brady 2011). Mustard greens, or *zaub ntsaub* are popular traditionally grown greens that are boiled in a bitter greens soup, boiled with meat, steamed, or stir fried. Chili peppers (*hob txob nplej* or *kua txob*) are widely used as seasoning, adding spice and aiding digestion; these are added to soups or crushed with garlic, cilantro and sometimes cherry tomatoes to make a delicious dipping sauce. Cilantro (*zaub txib qab* or *zaub txhwb qaib*) is one of the most widely used culinary herbs, chopped and sprinkled on top of a variety of dishes, like noodle soup, just before serving. Pumpkin is grown in a variety of shapes and sizes, a favorite boiled vegetable to eat plain or in soup; it stores well during the winter, making it an important crop in adapting to the shorter growing season characteristic of this climate. Bitter melon

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<sup>14</sup> A detailed chart listing culinary species observed in Hmong gardens and farms in Providence, along with their preparations, can be found in the Appendix.

(*dib iab*), a traditional favorite among the older Hmong, is typically boiled in soup with chicken, beef or pork, along with greens.

Food crop choices typically vary by generation. The main difference seems to be that people of the older generations grow more bitter vegetables, like bitter melon and bitter ball, because these are traditional foods from their homeland; younger people tend to grow less of these crops, or none at all, as the bitter taste is less preferred by those with more “Americanized” palettes, a finding that is consistent with findings presented by Kathryn De Master from her work with Hmong gardeners in Madison, Wisconsin (2003). For members of the young generation, traditional food crops such as bitter melon may be of diminished importance as they do not hearken memories of home and generations past, as they do for older Hmong who lived much of their lives in Laos; as Wa Vue, Cindy Wolff, and Keiko Goto (2011) gleaned from interviews with Hmong mothers in northern California, “Hmong food is us, helping us remember who we are” (p. 200).

For younger and American-born Hmong, these traditional foods may hold a diminished role in their lives and identities. However the appreciation of fresh produce is not entirely lost to the young generation; Chee Moua enjoys growing lettuce because salad is her favorite American food, and she enjoys making it for herself and for her family of eight (Interview with Chee Moua). Her children also enjoy vegetables like squash and long beans, and love to eat the salads she prepares with fresh tomatoes and cucumbers. This example counters Wa Vue, Cindy Wolff, and Keiko Goto’s finding (2011) that many Hmong mothers are unaware of healthy options in American cuisine; Chee Moua seamlessly incorporates fresh, home-grown Hmong produce into an example of healthy American cuisine, to the enjoyment of the whole family. The study by Wa Vue, Cindy Wolff, and Keiko Goto notes that mothers persisting in farming practice are able to more easily afford produce than non-farming community members, and due to this practice they view Hmong foods as more affordable than American foods. Several of the interviewees in this project noted the affordability of homegrown produce. Continued farming practice by Chee Moua and other growers demonstrates the great value of agricultural persistence in adapting to this new context, in terms of affording and accessing healthy and culturally preferred foods and providing satisfying meals for their families.

Through this research I found that market growers have a range of strategies regarding the varieties of crops they grow for the market, and there is a great deal of adaptation in this process, as market growers are continually learning, from season to season, how they can make their business profitable through the types of food crops they grow. For market growers, choices of which crops to produce are largely based on specific farmers market clientele and on interactions with other farmers, which will be detailed later in this chapter in a subsection on intercultural knowledge exchange. For market growers, crops grown for family consumption are often different than crops grown for the market, and knowledge of nuanced, often culturally-based consumer preferences at the different farmers markets is an important business strategy for market growers. These findings indicate that adaptive strategies of Hmong families are not uniform, but based on varied personal preferences and livelihoods; the foods that each family chooses to grow depend on various personal choices and circumstances, but all interviewees integrated a variety of traditional Hmong foods into their growing practice.

## *Medicinal Herbs*<sup>15</sup>

Phillip Yang estimates with confidence that 80% of the Hmong community in Providence still uses herbal medicine. I documented the production of these plants at every site I visited, from the farm to the community garden to the backyard garden. Most of these plants are grown in pots in backyards or patios for easy home access, and the pots are brought inside during the winter. The older women of the community are known as a great source of wisdom about plant medicines and what to do in order to heal various ailments. In several homes I learned about a variety of herbs, from those used to help women recover after childbirth, to those that “make men strong” (the woman’s husband said, in response to this description, “I’ll give it to you straight—it’s like Viagra). Herbs employed for this purpose include *kua txob ntsuab* and *nkaj ntoo*.

Tenders of medicinal plants emphasize that the use of plants may vary from person to person, and that plants often have many uses (personal communication Kia Yang, Vue Yang and Mee Yang). Many herbs are prepared “with chicken soup” as a general tonic; these herbs include *suv ntsim* and *hmaab ntshaa*. Several herbs are often combined to treat specific ailments such as digestive problems (dill, lemongrass, *plooj qhwv yeeb*), to reduce fever (*nrab koob*, *paj kub tub sab*), or to help women recover from childbirth (unnamed species in Apiaceae family, *ko taw os liab*, *tshuaj rog ntsuab*). A plant known a *rag dag* is used to treat ear infections; the hollow stem is cut, and the herbalist blows through the stem into the ear three times—this is repeated three times per day. The same herb may be boiled 20-30 minutes to make a tea known to remedy urinary tract infections and menstrual cramps. An herb I found very interesting in Vue Yang’s medicinal herb garden was *qos nplooj nte*, an herb that prevents drunkenness—Mrs. Yang boils the roots and makes a tea for her husband to drink before he goes out with his friends or attends Hmong ceremonies where the rice wine is sure to be flowing. A common therapeutic preparation involves chopping herbs and boiling them with eggs. This meal is eaten in the morning for three days straight; if no improvement is made, another herbal concoction is tried, but the women I spoke with concurred that the preparations usually help dramatically after three days. Preparing single herbs as a tea by chopping and boiling them, then straining out the plant material is the third common method of therapeutic preparation. While suffering from an ongoing stomach ailment Chang Xiong prepared eggs with several herbs for me for dinner after a day of working at the farm, then sent me home with a bunch of *Kalimeris indica* (interviewees were unsure of the Hmong name) to be eaten for breakfast with eggs following the previously described method, and as a tea at bedtime. After three days, the problem was much improved as she promised.

There is concern in the community that the younger generation is drifting away from this tradition, buying pharmaceuticals at the drugstore. One interviewee stressed that herbs are natural and better for the body, and also much less expensive. Along with growing their own food, growing their own medicinal herbs cuts down on costs and helps sustain health throughout the year. My interviewees hope that the younger generation takes advantage of the wisdom held by their community about natural medicines, and they are always eager to show me the herbs they are growing and describe their uses to

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<sup>15</sup> A detailed chart of medicinal species observed at Hmong gardens and farms, along with their uses and preparations, is available in the Appendix. A photo montage entitled “A Glimpse into the Hmong Medicine Garden” is also provided in the Appendix.

me, seeming happy that a younger person is seeking out knowledge about this approach to healthcare.

## 5. Resourceful management

Farm infrastructure such as trellises for vines that can be easily built with natural materials are seldom constructed with bought materials. Tree branches were a popular material used to build trellises and support the aforementioned “living walls” at both the farm and community gardens. Scarecrows made from plastic covers on clothes hangers that come from the dry cleaner, attached to long tree branches and stuck upright into the ground, served as humanlike sentinels to help keep the squirrels, birds and raccoons at bay. Wang Yang constructed a snare made of a tree branch and twine in order to try to catch a raccoon that was stealing his young ears of corn—a snare he often used in the jungles of Thailand to snag animals for meat during his family’s flight from Laos.

Some families practice rainwater harvesting in order to mitigate the issue of lack of water at the Hmong Community Farm. Collected rainwater is then used when the weather is dry, or for crops that need greater amounts of water to produce quality fruit, such as cucumbers, summer squash, and cherry tomatoes (personal communication with Phillip Yang). Several families had large plastic barrels or troughs at their plots to collect rainwater. Wang Yang had dug a deep hole in his plot that he lined with black plastic (the same black plastic he used as a moisture retention aid for his cucumber crop) that served as a rainwater collection tool. The downfall of these methods of rainwater harvesting, as all were open to the air, is the potential for mosquito breeding. Some families instead brought jugs of water in the back of their cars—a very time consuming method of watering for a 33’ x 89’ plot. Having a generator to pump the well water at the farm would be an immeasurable improvement. Nonetheless, Hmong growers observed are very resourceful in ensuring that their crops have what they need to be successful.

## Conclusion

In sum, the Hmong farming style is not prescriptive, and no one plot looks exactly same, but the innovation, resourcefulness, color, and variety makes the Hmong farming style easy to identify. The low-input and resourceful methods of infrastructure development and farm upkeep help to save money and create a system of farming that demonstrates sustainability in its use of natural and reused materials. Intensive intercropping and successive planting helps keep pest problems at bay, holds moisture,



A trellis constructed of tree branches and twine, supporting bitter melon vine, at the Hmong Community Farm.

prevents soil erosion, and helps to ensure a bountiful harvest [Altieri 1987; Innis 1997; Jeavons 2012].

Notably the Hmong approach to intercropping differs from the western approach; while the western approach is based on scientific studies of companion plants that are organized into prescriptive charts as seen in John Jeavons' *How to Grow More Vegetables* (2012), there seems to be no ideal pattern or pairing system of companion plants in Hmong gardens. Each gardener has learned from parents and elders about how to plant, and then observes over the years what works for them and continues in that way, with the understanding that each plot of land and each season are different. Thus, planting patterns may shift, supporting Fikret Berkes' assessment that within traditional knowledge systems "rules may be used flexibly and may vary from one year to the next, using cues from the ecosystem as feedback" (Berkes 2012, p. 284; Berkes et al. 2000). This observed flexibility and non-prescriptive practice is a key finding in the exploration of how the Hmong farmers in Providence have adapted to this context; the fluidity of their farming practice allows them to learn from season to season, trying new planting patterns and techniques.

Shifting cultivation patterns and fostering high species diversity helps growers keep pest outbreaks at bay, even though they are unsure of how to get rid of the pests. Quick, savvy fixes like snares, makeshift scarecrows, and recycled-material rain barrels help them respond to the particular challenges they face each year. For market growers, the array of varieties grown each year shifts and expands as a result of communication with customers and other farmers. Thus the process of adapting to this context ecologically and socially continues year after year, for subsistence and market growers alike, as they draw on skills and knowledge passed down from elders and responding to the demands of this particular environment. These observed practices provide a nuanced answer to my question about the specific techniques and adaptive practices of the Hmong in their agricultural persistence. This finding is also echoes Neva Hassanein's observation that "local knowledge is the practical skill that develops with mindful attention to the unique, yet shifting, social and physical features of a locality and that is fundamentally tied to direct, personal experience of a particular place or activity" (Hassanein 1999, p. 76). The shifting, adaptive nature of Hmong farming knowledge has enabled them to wisely adapt to changing environments many times in their migratory history, just as they have adapted to life in the Providence area. Ways in which knowledge and resources are shared to aid adaptation in Providence will now be outlined.

In my observation of Hmong farming techniques, several core principles of agroecology, rooted in support for biodiversity and ecosystem synergy, (Altieri 1987) were widely used as part of the traditional agricultural practice of the Hmong<sup>16</sup>, suggesting that Hmong farming techniques may indeed "represent signposts along the road to an ecological agriculture" (Perfecto, Vandermeer and Wright 2009: 63). Recycling of biomass and optimizing nutrient availability can be observed in the use of garden scraps and organic waste as mulch after the harvest and at the end of each season. Securing favorable soil conditions by managing organic matter and enhancing soil biotic activity is realized through compost use at community gardens, Pak Express, and Xiong Farms, and intercropping in all Hmong growing spaces is a key method for supporting

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<sup>16</sup> See Table in Appendix: "Alignment of Hmong Farming Practices with Agroecological Principles."

soil life and nutrient balance. Losses due to flows of solar radiation, air and water is minimized by the use of living mulch, intercropping, varied plant heights, and cropping techniques that minimize the amount of bare soil exposed to evaporation and erosion. Species and genetic diversity is especially high in Hmong gardens, with a mixture of crops and herbs cultivated throughout the year, a finding that was supported by a study of Hmong botanical diversity in Sacramento, California by Jan Corlett, Ellen Dean, and Louis Grivetti (2003). Lastly, the Hmong technique aligns with the principle of enhancing “beneficial biological interactions and synergisms among agrobiodiversity components” through the integration of organic matter into the soil; hand tilling and digging the soil rather than using compacting, oxygen-depriving machinery; intercropping; and creating a beneficial environment for soil life through cropping techniques that help retain moisture.

Importantly, although Hmong techniques do demonstrate alignment with these principles in several ways, there are also ways in which they do not align with agroecological principles, thus seek to benefit from knowledge sharing between various farming traditions that remedy the gaps in knowledge and practice. Key gap areas include knowledge around alternative management of pests and soil fertility, including knowledge of what kinds of organic amendments are available and how to access them, how to build and operate compost systems, and improved methods of rainwater harvesting (many of the rainwater harvesting structures built at Hmong Community Farm appeared to be potential mosquito-breeding locations, so structures mitigating this risk would be helpful). Areas in which the Hmong lack expertise are likely areas in which other area growers are well-versed, so potential for mutual knowledge exchange in order to maximize the alignment of agroecological principles across the board is promising.

## B. Adaptation through knowledge and resource sharing

Interviewees in Providence shared with me that, in the Hmong community, knowledge about farming is passed down from generation to generation, and resources and harvests are shared among the family and community (Interviews with Kia Yang, Phillip Yang, and Chee Moua). This culture of knowledge and resource exchange has been helpful for the Hmong farming community in Providence as they adapt to this new environment. Exchange among Hmong growers in Providence occurs both in the traditional way—from generation to generation within the Hmong community—and in new ways—between and among generations, across great distance, and with various ethnic groups in the Providence farming community.

### 1. Knowledge and resource exchange in the Hmong community

Here in the US, among my interviewees, knowledge and resources are not only passed down from older family members to those of the younger generation, but between and among various members of the community, sometimes across great distances. It is important to note, however, that knowledge sharing from old to young faces great challenges today. Julie Yang shared with me, for instance, that it is difficult for young Hmong women in Providence to learn herbal medicine from their mothers and grandmothers; with busy work and school schedules, learning such a complex and intricate system of knowledge and practice is not easy (personal communication with Phillip Yang and Julie Yang). In addition to being too busy for things like farming and learning herbal medicine, many of the young people simply don't want to learn these

skills anymore, which leaves the older generation without “helpers,” concerned about what this means both for the young and for the knowledge itself (Interviews with Kia Yang, Phillip Yang, and Chang Xiong). This is part of the reason why Chang Xiong was so eager to teach me some of her farming skills; “whatever you want to know, I teach you,” she said, explaining to me that not many young people were seeking out this knowledge anymore. There are some exceptions to this rule; Joe Vang’s daughter is eager to learn from her grandmother Chang Xiong, and Mr. Vang is excited to start cultivating part of his property for her to start gleaning this knowledge at the young age of eleven (Interview with Joe Vang). Additionally, although he doesn’t foresee a life as a farmer, Thai Yang suggested that if he marries a Hmong girl they will likely have a backyard garden, and continue to grow fresh produce in the way they have learned from their parents (Interview with Thai Yang). The findings of this project were largely consistent with Kathryn De Master’s (2003) that, according to one of her interviewees, Hmong youth have “their own ideas and own ways of adapting” (p. 132). However, the few exceptions to this finding illustrate that livelihood and adaptation choices are nuanced and not generalizable to any generation; this will be discussed in greater detail in the later chapter on perceptions of farming as a livelihood in the Providence Hmong community.

Despite the great challenge of adjusting a life where the young do not necessarily want to learn from the old—a huge shift in Hmong life—the sharing of knowledge has still been a key tool in the adaptation process for Hmong growers in Providence. Knowledge sharing has been a critical adaptation strategy in learning how to adjust to a shortened growing season, how to manage soil fertility and pests, how to access resources and land, and how to grow as a business—all of this in a foreign social context. Since some families migrated here before others, older members of the community may ask uncles, aunts, siblings and cousins who arrived before them for advice on how to farm in this country. Important topics like cities with the best land access, when to start seeds, and what crops to grow for market are common areas of inquiry. When starting her farming business, Chang Xiong called her son-in-law’s sister, who lives in Wisconsin, to ask her which crops have been her biggest sellers, and for other advice on successfully selling to American consumers. So, knowledge is exchanged not only from the old to the young,



Mustard green plants selected for seed saving at Hmong Community Farm are tied together to ensure they aren't harvested before producing seed.

but between and across generations and long distances, aiding the adaptation process to this new social and environmental context.

At the Hmong Community Farm, seeds, food, and knowledge are shared between families, creating a communal space much like my interviewees describe their villages back in Laos. Having a place of their own in the Hmong Community Farm was helpful in adjusting to life in Rhode Island, with trust being a major concern for the community:

The Scituate farm it's all Hmong people, all the families that we know in the community, that belong in the community. We don't allow other ethnic groups going in, just in terms of trust, because as you went through, we farm in there, we have 45 families in there, we don't even put up a fence, we don't even divide up anything, all we do is just draw lines and say, okay you take this spot, I'm taking this spot, okay. We don't even put a fence up. (Interview with Mee and Wang Yang)

Insulated by thick surrounding forests and tended solely by the Hmong, it has a feel of being detached from Rhode Island, a place of its own where the Hmong community maintains cohesiveness. In this place of community solidarity and trust, a great deal of exchange occurs within the community. As time goes by and more ethnic groups interact at community gardens in the city, intercultural trust and exchange seems to be growing as well—intercultural exchange will be detailed later in this chapter.

### *Seed Saving*

Many seeds were brought to the United States from Laos during Hmong families' migration to this country. Now, seeds are saved from season to season. At the beginning of each growing season, farmers trade with each other so that each farmer has all the varieties they need for a diverse harvest each year. Phillip Yang highlighted the importance of this practice: "Seed saving multiplies the amount we are able to grow each year, and it's free" (personal communication with Phillip Yang). Seeds that were brought to the US from Laos and cannot be easily purchased in the US, so seed saving is an important method of preservation for traditional crop varieties. Seeds are sometimes bought at Asian markets because these markets tend to carry more of the desired varieties and are also more reasonably priced than garden or home goods stores. Seed saving is not done at random; the strongest plants are left to go to seed so that, each year, plants that are best suited to the specific environment are selected and their unique genetic codes saved. At the Hmong Community Farm, loosely braiding or knotting the tall stems together indicates the plants chosen for seed saving; this way a family or community member does not prematurely harvest the plants selected to go to seed (as seen in photo). Several interviewees noted the expense of purchasing seeds in the US (Interviews with Kia Yang, Chee Moua); by bringing seeds from Laos and continuing to save and share seeds from season to season, Hmong growers in Providence are able to save money and continue producing their preferred crop varieties, marking an important adaptive strategy for agricultural persistence in Providence.

### *Sharing and Saving the Harvest*

The harvest is shared as well. The collective space of the Community Farm is a common gathering place during the growing season, and people often bring a grill and eat

together in the back corner of the field. Knowledge surrounding food preservation is exchanged between farmers, as the Hmong had to learn how to sustain themselves through a long winter upon their arrival in the US using refrigeration appliances entirely unfamiliar to them. My interviewees have been successful in growing enough food to provide produce for their families throughout the winter, mainly by freezing vegetables and herbs in the fall at harvest time. Chee Moua grows and saves enough produce to feed eight children year-round –a task that requires three large freezers (Interview with Chee Moua). She visits the grocery store “only for rice.” Most growers, like Chee, have huge freezers at home stuffed with the bounty of the harvest, promising self-made sustenance through the winter.

In November, Kia Yang invited me to her home to observe and help make fresh tofu. Several times in October we visited her plot at the Hmong Community Farm to monitor the progress of her soybeans, waiting until the second week in November when, finally, they were dry and ready to be harvested. A young Hmong woman came to help as well, and to learn the process of making tofu from Ms. Yang since her own mother did not know how to make it. After a five-hour process of soaking, processing, boiling, and stirring, we indulged in the finished product with a delicious dipping sauce of crushed chili peppers, cherry tomatoes, and cilantro. Kia Yang only makes tofu a couple of times a year since it is such a time consuming process, but she enjoys keeping this culinary tradition alive after learning the skill from her grandmother as a child in Laos. The other pupil and I marveled at Kia’s patience as she slowly and carefully stirred the massive pot, waiting for the soybean pulp to coagulate and curdle, ultimately deciding that making our own tofu would not be a regular practice. Still, we both felt honored to have learned this traditional skill and took diligent notes so that, when the inspiration strikes, we too can make our own tofu just like Kia Yang, her mother, her grandmother, and probably many generations of Yang women before them.

The persistence of this cultural tradition, despite the intensive labor it demands and despite the affordability and wide availability of tofu at the supermarket, highlights the importance of cultural continuity for the Hmong. This particular example points to the hard work ethic of the Hmong—that they are not lazy, and are willing to put in hours of time and effort to create a product that not only connects them to their family and their heritage, but that is of superior quality than what they could buy at the supermarket. And this 5-hour kitchen process was not all it took to make the tofu—the process began when Kia Yang planted the



Kia Yang carefully stirring a pot of boiled soybean pulp, a tedious step in the process of making tofu.

soybeans in early spring, tending them carefully all season until November when they were dry on the vine, an entire season of anticipation culminating in this delicious product we enjoyed with chili sauce. In Kathryn De Master's research (2003) she found that "laziness" is a taboo trait in Hmong culture, and it was often used in reference to food preparation, to describe foods that took no preparation. Kia Yang's intensive method of tofu preparation is certainly not indicative of laziness, but of patience, diligence, and hard work, a cultural practice that, much like the skillful practice of gardening, "negates laziness" (De Master 2003). Without such a work ethic, the strides the Hmong in Providence have made in adapting to this environment likely would not have been possible.

## 2. Intercultural exchange of knowledge and resources

The sharing of knowledge across cultures has also become a common part of Hmong farming in the Providence area. Growers have different processes for choosing the crops to be grown for home consumption and for the market; while traditional Hmong crops are grown for their own consumption and some of these are taken to the market, the requests and suggestions of Americans and other immigrant communities shape their market decisions. At the Crispy Greens table one Saturday I inquired about a certain unfamiliar green vegetable; the seller didn't know the name or the use, but said they sold it because of a request from the African community. Through interactions at the Glenham Street garden, where Southeast Asian, African, and Haitian gardeners come together, growers have found that they like many of the same vegetables, and that bitter greens and spicy chili peppers are common dietary staples. The clientele at the Broad Street Market is incredibly diverse, and one can observe people of many different cultures coming together to share traditional greens and herbs, and an oddly shaped, pale but vivid green, prickly vegetable called chayote. Charlie Xiong is careful to consider cultural preferences when planning for each market he attends:

I go to the Italian areas, I have to bring the ones the Italians like. I go to Asian and American places, I have to bring ones they like. I go to Spanish, I bring other things. And you know, the African and the Asian almost eat the same, and the Spanish! And at Hope Street for the college students who come by, I have to pack different because they're students, I don't pack a big bunch for the big family." (Interview with Charlie Xiong)

Knowing that there is a large African clientele at the Armory Park farmers market on Thursday afternoons, Charlie Xiong makes sure to pack plenty of their favorite crops; for this market he takes 300-400 bunches of sweet potato leaves and 12 bushels each of chili peppers and bitter balls—"you have to have all that stuff ready." While one grower emphasized the Hmong community's mistrust in other ethnic groups that characterized their arrival to Providence<sup>17</sup> and the advantage of being protected in their isolated Community Farm space, it seems that close intercultural interactions in the community gardens have increased understanding and feelings of commonality.

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<sup>17</sup> This mistrust is possibly due to or increased by the high crime rates in the Southside neighborhoods where most Hmong were located upon arrival, cited by the Hmong Resettlement Study Providence site report.

Growing amongst other farmers at the Urban Edge Farm property has allowed Charlie Xiong to learn a lot from his neighboring farmers who, aside from Chang and George Xiong, his sister-in-law and brother, are two young American farmers.

Farming experiences I don't have that much but I learn from the farmer in here too. I seem them do this way, I try that way. Sometimes they see I do this way, they'll try my way. It works better sometimes my way, sometimes it works their way, like that. (Interview with Charlie Xiong)

Interaction with American growers has also shaped market production decisions; Charlie Xiong befriended an American farmer who advised him to grow asparagus and rhubarb, perennials that sell well to American consumers, and a neighbor farmer at Urban Edge taught him about growing celeriac (personal communication with Charlie Xiong). Chang Xiong has found that kale, lettuce and tomatoes are the biggest sellers to Providence consumers, and she grows many varieties of these “cash crops” (personal communication with Chang Xiong). She also sells a lot of Asian vegetables as well—the extra large-sized Asian cucumbers are a popular item, as well as Japanese and Thai eggplant, long beans and Japanese yams. Shopping at the market it was clear that the diverse and exotic selection provided by Hmong growers stimulated curiosity among consumers, and their traditional greens and herbs, as well as more foreign items like bitter ball, bitter melon, sticky corn, and chayote captured the attention of shoppers and opened up conversation—sellers were always happy to share cooking tips.

Phillip Yang, member of SCLT’s Community Grower’s Network Council, often consults American farmer Rich Pederson (of SCLT’s City Farm) with growing and pest management questions; one guideline he gleaned from this relationship is that, if your corn is “knee high by the fourth of July,” you’ll have a great crop that year. Mr. Yang boasted that his corn was past knee high by this marker, and sure enough his family enjoyed an abundant harvest of corn in the fall of 2012. Charlie Xiong also mentioned Rich Pederson as a helpful farmer in the Providence community. Mr. Xiong recently began growing Brussels sprouts, not a traditional crop for Hmong growers, and had trouble growing them so that the lateral buds were an acceptable size to take to the market. Mr. Pederson’s helpful advice was to break off the terminal bud so the lateral buds grow larger.

These examples of intercultural knowledge exchange in the Providence farming community demonstrate the importance of knowledge exchange as an adaptation strategy for the Hmong community, and notably a strategy that has emerged in the context of this environment. Wang Yang mentioned the distrust the Hmong community felt towards other ethnic groups upon moving here, citing the isolation of the Hmong Community Farm as an asset because they could trust their neighboring growers; in Laos there was very little exchange with other cultural groups, as the highlands were predominantly inhabited by the Hmong (Interview with Wang Yang). Therefore, exchanging knowledge with other ethnic groups in Providence is a unique adaptation strategy that has emerged within this context, highlighting the fluidity of Hmong adaptive strategies and again recalling Neva Hassanein’s (1997) characterization of local knowledge as “shifting” in response to the “social and physical features of a locality” (p. 76). With the Hmong and so many other ethnic groups involved with growing and cooking fresh food in

Providence, opportunity for cross-cultural exchange and mutual learning is ripe and will be discussed at greater length in a later chapter on suggestions for further support of the Hmong farming community, and the urban farming community as a whole.

### C. Opportunities for Hmong Farmers in Market Production

There seem to be two main pathways that Hmong farmers who grow for the market have followed in order to access the education, resources, and space needed in order to run a farming business. Growers who have been through the Urban Edge Farm training program lease farmland at this peri-urban site, while other growers glean their produce from multiple urban garden sites.

#### 1. Urban Edge Farm growers

Xiong Farms and Pak Express Farm achieved their main support from SCLT's new farmer program at Urban Edge Farm in Cranston. In this program, farmers in their first year participate in communal management of the farm and have the opportunity to learn through utilization of the land, the equipment, and the greenhouses. Charlie Xiong of Xiong Farms and Chang Xiong of Pak Express Farm (along with her husband George Xiong) participated in 2004, along with a Cambodian, African, and Spanish grower. Participants learned "how to manage money, and do the tax, and the fertilizer, and how to take care of the land. And how to...handle the market, how to wash, how to pack. Everything we have to learn at the same time" (Interview with Charlie Xiong). Assistance with handling the market, finances and paperwork was especially valuable for Hmong growers who already had vast knowledge of growing food (personal communication with Charlie Xiong and Chang Xiong). After completion of their training at Urban Edge, Chang and George Xiong and Charlie Xiong went on to lease land on the same property in Cranston to start their businesses.

Chang Xiong said that, typically, SCLT leases one acre per farmer, but since she and her husband did such a good job farming, they were able to lease two acres. With assistance

from a RI Department of Environmental Management (DEM) program that reimbursed 70% of their building costs, the Xiong's were able to build a greenhouse on their leased land last year. In this greenhouse, they are able to continue growing food such as beets, carrots and cold-season greens throughout the winter months. Pak Express Farm can be found selling at the Broad Street and Pawtuxet Village farmers markets, and is a partner in Four Friends CSA. This year Pak Express Farm is also providing produce for Farm Fresh RI's market



Pak Express Farm sells not only fresh produce, but homemade *nime chow* at the Pawtuxet Village farmer's mobile program. Visitors to the Pawtuxet Village farmers market fortunate enough to have the opportunity to buy some of Chang Xiong's homemade *nime chow*.

Xiong Farms can be found at the Hope Street, Broad Street, Armory Park and most weeks the Goddard Park farmers markets. The Armory Park market happens on Thursday afternoons, and the Goddard Park market is held on Friday afternoons. With both the Hope Street and Broad Street markets taking place on Saturday mornings, Charlie Xiong's sons run the Broad Street table while Mr. Xiong sells at Hope Street. Mr. Xiong has a very busy week during the growing season:

<i>Charlie Xiong's Week-at-a-glance, Xiong Farms</i>		
	A.M.	P.M.
<b>Sunday</b>	Rest	Rest
<b>Monday</b>	Harvest & field work	Harvest & field work
<b>Tuesday</b>	Harvest & field work	Harvest & field work
<b>Wednesday</b>	Wash and pack	Hope Street market
<b>Thursday</b>	Wash and pack	Armory Park market
<b>Friday</b>	Harvest, field work, wash and pack	Goddard Park market, if time
<b>Saturday</b>	Hope Street market	Field work

While several growers at the Urban Edge Farm have chosen to acquire organic certification, neither Pak Express Farm nor Xiong Farms has chosen to go through the process of obtaining this label. When customers ask, Charlie Xiong answers “Yeah, we do organic. We don’t have certified organic, but I do the organic way”—and he reports that customers are generally happy with this response. According to Mr. Xiong, the organic certification is “too much work”—the amount of paperwork required is burdensome and costs a lot of money. The paperwork is also very challenging for people like Mr. Xiong for whom English is not the primary language. A neighboring farmer to Xiong Farms has the certification, and is required to buy five or six truckloads of compost in the beginning of each season to meet the criteria. Mr. Xiong explained,



Chang Xiong tends lettuce seedlings in a greenhouse at Urban Edge Farm.

For us it's just buy one or two trucks compost, that's it and we just spread around...if your soil good you don't need that much! But if you want the organic certification you have to buy everything. (Interview with Charlie Xiong)

Chang Xiong and Charlie Xiong agree that if consumers are content to trust their farmer when the farmer says their methods are organic, why go through the cumbersome and bureaucratic process of certification?

## 2. Urban community growers

While Urban Edge Farm is a more rural site where established growers lease an acre or more or grow their market produce at one site, other market growers are producing strictly from urban community garden sites, where the limited space necessitates having several sites if running a business is to be plausible. Urban growers have plots at several gardens and grow intensively in these spaces, producing a wide variety of crops and bringing them to market each week. Two growers I have spoken with operate in this way. The first is Crispy Greens, and the second is the collaborative Southside Community Growers. Both can be found at the Broad Street farmers market on Saturdays. Crispy Greens is a family operation working at several community garden sites and two backyard gardens, mostly in Providence. They made a beneficial connection with a farmer in Middletown that helped expand their production for their family and business:

We started off with little gardens in our back yard and on the Southside and then my mom met a farmer in Middletown, he put up a newspaper ad, he needed help with his farm, so my mom went to help him. My mom worked for him, and then after my mom retired my mom asked him if my mom could use a little bit of land because the Southside the garden was, I don't know how big it was, but its a little bit small. So my mom would like to expand, so she could grow more varieties. So the farmer lets my mom, because my mom has been working for him for 15 years, so he give my mom a plot of land so we still grow over there to this day. (Interview with Long Yang)

Connections like these, Long Yang explained to me, illustrate an advantage to growing food here in Providence, and in the United States, compared to in Laos: "Over here we have a lot of networks so we find more opportunity to do things" (Interview with Long Yang). Here, mutual benefit can be found in relationships beyond just the family.

Southside Community Growers is a group of farmers with plots at Glenham Street, Somerset Street, the Hmong Community Farm, and several other community gardens sponsored by SCLT. These women sell and work collectively, and three generations are represented every week: mothers, daughters, and granddaughters. Piles of mustard greens, kale, bagged lettuce, collard greens and cilantro are found weekly at their table, along with eggplant, chili peppers, squash, long beans, and other vegetables. The Southside Community Growers first introduced me to chayote, a vegetable whose Hmong name *taub taaj* means, fittingly, "furry squash" (see chayote pictured right). Chayote is prepared



Chayote or *taub taaj* for sale at the Broad Street market by the Southside Community Growers.

stir-fried, boiled or steamed with other vegetables and meat. It has a pleasantly juicy and dense flesh with a slightly sweet, mellow flavor. In the fall, Kia Yang brings large potted lemongrass plants grown at her Hmong Community Farm plot to sell at the Community Growers table and gives advice on keeping the plant healthy for the winter, using the stalks for stir fries, and making a delicious tea that is good for digestion.

### Conclusion

Hmong market growers have no shortage of produce to sell and speak positively about the good business they do each week at the market, but all growers, especially those relying solely on community garden plots in the city, express discontent that there is not more space for them to farm. The desire for more land is common to both market and subsistence growers. This desire for more land illustrates this community's yearning for continued control over their means food production in this setting; as the earlier chapter on Hmong history and cultural context explained, Hmong life in Laos was characterized by complete (or close to complete) autonomy in their food production, and the freedom to move from place to place and cultivate as much land as they desired, unchallenged (Tapp 1989, Mortland and Ledgerwood 1987, Lee 2005). When I commented on the large size of the Hmong Community Farm, Phillip Yang just laughed, explaining that this amount of land is nothing compared to what just one family had back in Laos (and the Hmong Community Farm is shared by about 50 families). The realities of the Hmong community's new social and geographical location in Providence disallow the kind of uninhibited farming practice that was possible in Laos; however, the widely cited desire for more land reveals that the realization of food sovereignty remains out of reach for the Hmong farming community in Providence. Although true food sovereignty is yet to be attained in this context, the case of the Hmong farmers in Providence illustrates that the movement for food sovereignty is highly relevant in the US context.

### **D. Challenges for Hmong Farmers in Providence**

In addition to land constraints, there are several frequently noted challenges still faced by Hmong growers in the Providence area, in spite of the Hmong community's resilient and industrious adaptation thus far.

#### 1. Soil fertility and pest management: chemical-based verses organic methods

As previously mentioned, maintaining the fertility of one piece of land from year to year presents a challenge to many Hmong growers due to their history as migratory farmers who practiced "swidden" or "slash-and-burn" agriculture [Tapp 1989; Mortland and Ledgerwood 1987; Lee 2005]. At the Glenham Street Community Garden, Southside Community Land Trust provides compost and holds educational workshops on how to use fish emulsion as an organic fertilizer, and these efforts have in general helped raise awareness about organic methods among community garden growers. Use of chemical fertilizers and pesticides does not occur at SCLT community gardens in the city.

Promoting organic growing methods is an important part of SCLT's work, so its employees and volunteers are dedicated to raising awareness and providing resources for the gardeners. Availability of compost provided by SCLT combined with the Hmong way of intercropping has created richly fertile gardens where there are few pest outbreaks and few problems with soil fertility. Growers do express, however, that weeds are significant problem here—much more so than in the highlands of Laos—and they spend a great deal

of time hand weeding. All growers say that this makes farming more difficult here in the US:

In here you have to put more work to them, to the vegetables, to the garden. Pick all the weeds out, put the new compost every time you grow, and it's harder. That's why we change, that's what I told you that the first time I don't know how to do. But that's all right. Over there in Laos, you don't need to do anything, so when the time comes you just take the seed and go plant it... and you go weed a little bit, not weed a lot, but they still growing. (Interview with Kia Yang)

On the other hand, at the Hmong Community Farm many farmers are not educated on the methods of, or even the possibility of, organic soil amendments. Older farmers in particular are often unaware of the existence of fertilizers other than chemical-based ones, and although they are disenchanted with the idea of using chemicals to grow their food, they think it is the only possibility, or that since American farmers use it, then it must be the right (or the only) option. With the shortened growing season, some growers believe that using chemicals for "boosting up the plants so they grow faster" is the only way to produce food in this stunted season (Interview with Mee and Wang Yang). Charlie Xiong has observed this pattern among older Hmong growers:

The Hmong people, the older than me...they know how to do it, the farm. Only thing that they don't know how to put the chemical, and sometimes they put too much... they don't know about the organic, they use chemical. They put really really heavy chemical. You can see it, their farm and our farm they're different when you go see it. Because when they start planting they put, you can see all the chemical on the ground. But our farm you can't see anything on the ground. All soil and compost and organic fertilizer.

(Interview with Charlie Xiong)

The same issue applies to pest management. Some farmers I have spoken with just let the insects have their share of some of the crop (due to intercropping and intensive planting, pest outbreaks appear to be small and concentrated). Others use chemical-based pesticides that they buy at a hardware store, believing that this is the only option for pest control in the United States. Many were unaware of organic methods of pest control. I observed use of pesticides in some plots at the Hmong Community Farm, and Phillip Yang stated matter-of-factly that the pest issues have to be dealt with, indicating that growers were unaware of methods other than chemical-based pesticide use. One grower expressed her belief that the pest issues are much worse here than they were in Laos:



Colorado potato beetles infested a large portion of eggplant crop at Hmong Community Farm in 2012; growers were unsure how to address the issue.

I think that maybe we live in the highlands, the mountains and maybe it was cooler and maybe not many people, not many pollution, and we don't have bugs.  
(Interview with Kia Yang)

The realities of pest population in Laos versus Providence are unknown, but this grower's comment is significant because it highlights nostalgia for home, and a view held by many older Hmong that farming was better and easier in Laos. Charlie Xiong contradicted this view in our interview, stating that he thinks farming is easier here. This could be due to the fact that he was the son in his family who attended school full-time in Laos, rather than farming intensively; also, he went through the Urban Edge Farm's training program so things like organic soil fertility and pest management are areas in which he is trained, unlike most members of the Hmong community. Kia Yang explained that she and other growers in her community are not sure how to handle pest outbreaks, and in a past season when the corn crop was a particular target among insects, they did not seek out advice for management of these pests:

We didn't go ask anybody, I don't know how the American farmers do it. We don't know. But we didn't go ask anybody because we don't know who can help. So we just let them eat it! And they eat half, and then we eat half. We grow the Asian corn, they're not that big, they're smaller, and they eating the top and we eating the bottom. (Interview with Kia Yang)

Mee and Wang Yang have reluctantly used chemical fertilizers and pesticides despite a belief that, "It's good to keep [pests] away from the vegetables and from the plants, but in the long run it's not good for you" (Interview with Mee and Wang Yang). For those aware of organic methods, availability and accessibility may be a challenge. Charlie Xiong highlighted that organic alternatives are not as widely available in stores (although their availability has increased in the past few years) and chemical-free alternatives are often more expensive (Interview with Charlie Xiong).

Although there are many ecologically sound characteristics of Hmong farming as it is practiced in Providence, the practices of this farming community should not be upheld as perfect or ideal. There appears to be fairly widespread use of chemical fertilizers and pesticides, especially among the older growers and especially by those who are not highly involved in SCLT programs through community garden workshops or the beginning farmer training program at Urban Edge Farm. These findings indicate a gap in the readiness of Hmong farming knowledge to sustainably adapt to this environmental context, and highlights an area where knowledge sharing and educational efforts are needed, especially since chemical use is coupled with a fear of the long-term effects of these products—Hmong growers in Providence do not want to grow their food using chemical inputs, but some view it as the only option. There are, of course, many growers who were not interviewed in the course of this research, so some growers may be unaware of the risks associated with the pesticides and fertilizers available commercially—the findings of my research, since interviews mostly included growers who are familiar with SCLT efforts and programs, may not represent the views of all Hmong on pesticide and fertilizer use.

The conundrum of pest control for the Hmong farming community in Providence highlights an obstacle in the adaptation process and makes clear the dominance of industrial agriculture in the commercial setting, since a visit to a retail store does not offer any obvious (or affordable) alternatives to chemical-based products. It also reveals that, since Hmong culture and knowledge is traditionally passed down from generation to generation, and farmers have never before needed advice from an outside source, seeking guidance in fertility and pest management is not an obvious (or possibly not an agreeable) adaptation strategy for all Hmong growers. Phillip Yang and Charlie Xiong are two interviewees who described proactive exchange of farming advice with others outside of their community but, notably, these two men both operate in professional settings where they interact with diverse peoples anyway, so this is a more logical option for them. Especially for elderly Hmong who do not speak English and have minimal communication with those outside of the Hmong community, seeking farming advice for challenges outside the scope of their farming expertise is not an easy or accessible approach. This gap in knowledge and practice, and how to move forward with these issues in mind, will be discussed in greater detail in the chapter on suggestions for further support of the Hmong farming community in Providence.

## 2. Soil contamination

As President of the Hmong United Association of Rhode Island, Phillip Yang is constantly thinking about the wellbeing of the community as a whole. He mentioned a deep concern for backyard gardeners in the Hmong community who are unaware of the widespread lead contamination in the soil in Providence and the surrounding areas and how to garden safely in light of this issue:

Some families are aware of the lead, a few of them may not know of it, may think that the soil is safe, you know? But in the city of Providence...there are a lot of leads in there, but people don't think that it's in there. And it will cost you and your health later down the line. My only concern is that, because we have a lot of small kids here, and those vegetables and those soils... it sticks to your shoes, and it will get into the vegetables, and when you wash it looks clean but it may not be as clean as you think. So that is one thing that I'm concerned more about it with the city garden, the community garden... it may not be as good as we think. We think we are safe but you never know. (Interview with Phillip Yang)

In SCLT community gardens, raised beds are constructed and lined with landscape cloth to form a barrier, and safe soil is brought in to fill those beds. In backyard gardens, however, those protective measures do not necessarily take place and food grown for home consumption may be at risk of being contaminated. SCLT works hard to educate the urban farming community in Providence on how to mitigate the risk of contamination through building raised beds, lining them with landscape cloth, and bringing in compost; Phillip Yang's concern that some backyard gardeners in the Hmong community are unaware of the risks of soil contamination and how to garden safely in light of this risk indicates that further education and support is needed in the Hmong community on this topic.

### 3. Climate and the growing season

The cooler climate and shorter growing season of Providence, Rhode Island also presents challenges for the Hmong farming community—farmers plant very early in the season in order to maximize their potential harvest, and sometimes lose the first crop due to spring freezes. Still, growers tend to take the risk and plant spring greens and herbs very early in hopes that they have a bountiful harvest in the spring, when many other gardeners picking up their rakes and hoes for the first time. Early freezes in the fall also pose a problem; one family at the Hmong Community Farm this year lost their rice crop to an early freeze; while most of the farmers grew a short-season rice to mitigate the risk, this farmer planted a more traditional long-season rice, and sadly lost it all. Many traditional crops are still grown, but the season for these crops is shorter than it was in the Southeast Asian climate. Kia Yang mentioned that yucca, one of her favorite foods from home, does not grow well here because the summer heat does not last long enough; while memories of home can be immortalized with the growing of some traditional crops, other foods from back home are not as easily resurrected in this environment. The challenges still faced in this area are to be expected considering the profound ecological shift that Hmong farmers have experienced, and the successes they have had thus far in growing many of their preferred crop varieties, even if for fewer months, demonstrate their savvy farming skills and adaptive capabilities.

### 4. Funding and resources

Lack of funding is a key challenge at the Hmong Community Farm, where there is a well on site but no generator to pump the water (personal communication with Phillip Yang). The Hmong United Association of RI is not in a financial position to purchase a generator, so farmers “depend on Mother Nature,” as they did in Laos, for their irrigation. Some construct makeshift rainwater harvesting systems or bring large jugs of water in the back of their truck to water their plants when rain is sparse, and a few use black plastic on water-intensive crops like cucumbers to help retain moisture. This year the crops fared well with regular precipitation, but during summers when two or more weeks pass without adequate rain, crop losses have occurred. For about \$250 a generator could be purchased that would make irrigation possible and greatly diminish the risk of crop losses.

With greater access to funding, farmers could also access helpful machinery and tools; currently all labor is done by hand. This is consistent with the Hmong way of farming back in Laos and has advantages such as allowing more space for intercropping and bypassing the soil compaction caused by machinery, but it takes a toll on the body, especially for older farmers. Most seasons the community collectively pays to hire someone to bring a tractor to the property and plow it, but this isn’t possible every year, and the community would like to have greater decision-making power and freedom in using machinery to work their plots.

Lack of funding is also the obstacle that keeps the Hmong community from accessing the most commonly cited desire: more space, more land on which to farm. This may not require a large sum—the Hmong Community Farm land is leased from the City of Cranston for just \$1 per year, but the cost varies by the opportunity, and such opportunities are hard to come by. George Xiong was paid for his time when he searched for land and found what is now the Hmong Community Farm roughly 30 years ago; funding to hire a Hmong community leader to conduct another similar search could reap

great benefits for the community. Ideas for more community land and ways to use funding if it becomes available will be discussed at length in the final chapter, detailing suggestions for further support of the Hmong farming community in Providence.

### Conclusion

In spite of the challenges faced by subsistence and market growers in the Hmong community, many persist in their agricultural tradition, growing food for themselves, their families, and the community in a way that embodies many agroecological principles and tenants of sustainability, evident in the community's goal to "grow as much food as possible with as little money as possible" on a small amount of land (personal communication with Phillip Yang). The success of Hmong farmers in Providence in continuing to grow many preferred varieties of crops and medicinal herbs demonstrates an impressive ecological adaptation, as they have come not only from an agrarian society to a non-agrarian society, but from a tropical environment to a northern temperate one. However, it is inaccurate to assume uniformity in the Hmong community in terms of agricultural practice, or to apply a romantic notion of agrarianism to all Hmong families living in America. Knowledge around fertility and pest management is limited and my findings indicate that, in spite of their hesitation to do so, many Hmong families use chemical fertilizers and pesticides. The next chapter will explore the nuances in how the Hmong view farming as a livelihood or form of supplemental subsistence in America, within and across generations.

## **VI. HMONG PERCEPTIONS OF FARMING AS A LIVELIHOOD IN AMERICA: INTERGENERATIONAL SHIFTS**

The love of farming, or the reliance on agriculture as a form of subsistence, should not be generalized to the entire Hmong population; like any culture, Hmong culture “is neither static nor stable” (Pao Lor in Her and Buley-Meissner 2012). Pao Lor (in Her and Buley Meissner 2012) presented a portrait of the three generations of Hmong and Hmong-American professionals, detailing their overlaps and the differences between them. She described “Hmong Immigrant Professionals” as working mostly in entry-level positions, with some advancing to prestigious positions in medicine, law, higher education, business management and public service; these community members became “symbols of hope for Hmong in the United States” (p. 149). This generation highly values the persistence of Hmong culture, through religion, rituals, respect for elders, upholding responsibilities in the community and clan, and knowing the family and cultural history. To them, losing any of these cultural identifiers is to diminish one’s culture. The “1.5 generation of Hmong Professionals” has achieved greater English language proficiency and has succeeded in higher education, many becoming “role models for success in modern society.” Like their parents’ generation, they hold cultural persistence as highly important, and their early struggles in adapting to this country “heightened and solidified their sense of purpose, particularly the necessity of becoming educated, working hard, and elevating the status of Hmong people in America” (p. 151). The key difference in this generation is the challenge of maintaining Hmong culture and passing their knowledge along when they are straddled with the “demanding reality” of busy modern careers and kids to send to school (p. 151). Progressing to the youngest working generation, the “First-Generation Hmong American Professionals” have received their entire education in the United States, are more proficient in English and less proficient in Hmong, and are “intent on advancing their careers and raising families” while they “may not necessarily be thinking about how they can use their professional experience to benefit the Hmong American community” and have “minimal proficiency” and “superficial understanding” of Hmong history and culture. Therefore, for this young generation of Hmong American adults, “their perception of what it means to be Hmong will not be the same as previous generations” (p. 153).

Pao Lor’s explanation of this continuum of Hmong professional identity is revealing, but includes no discussion of how the agrarian tradition and farming practice fits into the picture; this research sought to explore how the continuation of farming practice, even simply growing some vegetables in a backyard garden, fit into the lives of Hmong Americans in Providence today. The differences in and degrees of involvement in farming are nuanced within and among generations, so where farming is concerned it is not so easy to divide the Hmong into these three generational categories. Choices related to farming and livelihood arose from the importance of self-sufficiency and survival in this new and different social context. Decisions to move away from farming were largely rooted in adapting to a culture in which farming is not valued and not a viable option for making a living. According to interviews with Phillip Yang, Joe Vang, and Thai Yang,

decisions to keep farming practice alive were tied to an appreciation for and a desire for connection to one's roots, for family and community ties, and for the great achievement that is associated with growing one's own food.

### A. The importance of self-sufficiency

Hmong culture developed in the context of migration and farming, with the underpinning of this lifestyle being the imperative of community autonomy and self-sufficiency; migration from place to place occurred not only to ensure soil fertility but also to keep a safe distance from other societies urging assimilation, and farming allowed the Hmong to produce all they needed for survival within their community (Lee 2005). My interviews indicated that self-sufficiency is highly valued in Hmong culture; although there is a great deal of sharing of resources and knowledge in the community, making one's own way with the knowledge and resources available, not being "lazy," and achieving great things is what brings honor to a person and to a family (Interviews with Chang and George Xiong, Charlie Xiong, Phillip Yang, and Joe Vang).

The value of self-sufficiency can be seen in Lor's discussion of the working professionals who have a "heightened" sense of purpose and are "intent on advancing their careers and raising families." It can also be seen in the varying degrees at which farming is practiced. There seem to be shifts occurring in the perceptions of farming as a livelihood in the Hmong community, although these shifts are not uniform. These shifts are occurring across generations, not only among the young people who are most exposed to American culture, but also among first and "1.5" generation immigrants as well. No generation holds a uniform view towards farming; there is much variation within the Hmong community in terms of how people view farming as a livelihood and to what extent they wish to continue the tradition in their own lives. The range of views expressed on farm and work illuminate not only the adaptation and evolution of Hmong culture and the dynamic nature of culture, but also the nuances in how farming is conceptualized in modern America.

### B. Farming and working in America: first generation views

It seems that the cultural imperative of self-sufficiency aided the process of adaptation to the modern working culture in America; while farming as a livelihood was not an option at the termination of the Hmong people's across-the-ocean migration, learning the ways of the American working world was critical to achieving self-sufficiency. First generation attitudes towards working in America are largely rooted in the necessity of working factory-type jobs upon arrival in the United States, highlighting the abrupt occupational assimilation previously described in the section on US approaches to refugee resettlement (Mortland and Ledgerwood 1987, Yang 2001, Goodkind 2006, Franzen and Smith 2008). However the first and 1.5 generations' ideas on what constitutes a good job in America are varied. While some hold the common first-generation ideology that their children should pursue "good" or "modern" careers in fields such as medicine, law, computer technology, public service, and education, others hold more liberal views that their children should strive for what fulfills them, even if it's farming. As previously mentioned, Chang Xiong finds her happiness in farming. However she believes that, for other people, "their brain is different from me and my brain is different from them"—while she finds pleasure in running her own business and focusing on farming, others find the same contentment in other occupations (Interview

with Chang Xiong). While Chang Xiong has been called the “super grower” of the Hmong community (personal communication with Kia Yang), she emphasizes that all young people should choose what they want to do:

I think it depends. People like to farm, they should farm. If people like to go to work they should go to work. It makes them stronger, stronger. (Interview with Chang Xiong)

Chang Xiong’s ideas about work contradict the values that prevailed in the Hmong resettlement process that focused on quick placement into low-skill menial jobs (Mortland and Ledgerwood 1987, Goodkind 2006); instead of championing the practicality of jobs clearly fitting into this modern technological society, she encourages a more self-actualizing approach to work. Mrs. Xiong’s views reflect the Hmong cultural imperative of strength and achievement; she simply views achievement differently than “traditional” parents who are pushing their children towards success through the conventional paths of modern American work, believing that doing work that you like, rather than work that provides a steady paycheck and social security benefits, is what makes you strong (Interview with Chang Xiong). Her determination to continue farming because of the satisfaction it brings her personally, regardless of social norms and expectations, adds an important dimension to this discussion on why and how the Hmong continue to farm in Providence and adapt their traditional knowledge to this context.

### 1. Work with a pen instead of your hands

However some parents’ views towards work indicate that the focus on quick assimilation into the American workforce that characterized the resettlement process have been influential in Hmong life; for some, adaptation was not learning how to farm in Providence, but leaving their agrarian lifestyle behind and trading it for the lifestyle that they perceived would help them survive in this context—a very different but just as logical adaptation strategy. Understanding the views of these members of the Hmong community is crucial to seeing the whole picture of Hmong farming adaptation in Providence—assuming that the perpetuation of farming (especially as a livelihood) is valued by all Hmong in Providence is a false generalization and does not tell the whole story of the Hmong experience and adaptation to life in this city.

Joe Vang, whose in-laws are the Xiong’s of Pak Express Farm, has observed that many older members of the community are surprised by their peers’ desire to continue farming. They ask, “I can’t believe you’re still farming...didn’t you do enough of it back in Laos?” (Interview with Joe Vang). These parents tend to encourage their children to get modern “American” jobs and keep busy rather than to spend their time farming. Mr. Vang’s parents encouraged him to study hard and get a job in the science and technology field:

In the Hmong community, my parents always told me that...you need to get an education so you can...work with a pen instead of working with your hands. And so a lot of the traditional parents still think that way. But with me I don’t think like that, because I’ve experienced [farm work] and I go, there’s nothing wrong with it. It’s just a different way of making a living. And so for me, I teach

my kid, if you want to be a farmer, I'm all for that. I don't know about what other parents may think. (Interview with Joe Vang)

Interviewees suggested that children raised by traditional parents, who encourage their assimilation into modern American working culture, hold the American idea that time is money—that it is a greater accomplishment to get a paycheck for eight hours of office work than an abundant harvest for eight hours of farming (Interviews with Joe Vang and Phillip Yang). For first-generation immigrants, this encouragement towards professional assimilation could largely be attributed to the necessity of working factory-type jobs immediately upon arrival in the US in order to survive in this country, considering the quick job placement focus of the resettlement system (Mortland and Ledgerwood 1987). Wang Yang worked in a chicken factory when he arrived in Rhode Island, an experience that was shocking considering the drastic difference between the mass-production of meat in the United States and the uninhibited animal husbandry tradition of Hmong life in Laos:

Back in Laos we raised animals--chickens, pigs, cows, horses...just that because we have land. Land is not really belong to anybody in particular, its just wide open and you can go and do farming anywhere you want, you can raise your animals, as much as you want, there's no law, there's no policies out there.

(Interview with Wang Yang)

Although the abrupt clashing of these two systems was shocking for Mr. Yang, this did not deter him from performing his job because “in this country you have no choice, and you have to go work for somebody” (Interview with Wang Yang). The same imperative for survival motivated Chang Xiong to work for twenty years in a jewelry factory in order to gain stability in this country before deciding to pursue the occupation she truly loves, farming:

I come here, very hard for myself. I can't understand. But I said one day, I have to be the seller. And now I got it, right? You have to plow, you have to think.

(Interview with Chang Xiong)

Chang Xiong’s advice for the younger generation is to stay in school, to work hard, and to “be 100% working” in whatever occupation they choose, whether that occupation is farming or anything else:

I have one son and six daughters. Many people they talk to me they say, how do you teach your daughter? I say, when they 5 years old to 10 years old I say, what do you want to do? Do you want to be 100% people or 60% people? They say, “Mommy I want to do 100%!” I say, “Go! 100%!” (Interview with Chang Xiong)

Now that her children are grown, with degrees and jobs in hand, she is happy with “nothing to worry” because her children can take care of themselves, and she too can take care of herself through farming. She reiterates that it is the responsibility of parents and of the government to ensure that children have the education necessary to pursue

whatever occupation they choose (Interview with Chang Xiong). Still the views of the more “traditional” parents, who steer their children away from farming and question their peers like the Xiong’s, are not surprising and do not show an unfair or unyielding parenting style; farming as a livelihood in this country is certainly not valued or seen as prestigious, and the policies in place make it extremely difficult to make a decent living through farming.

The past several decades have shifted the farming landscape from smaller-scale family labor farms towards industrial-scale high productivity farms; in this way, agriculture is seen as interchangeable in principle with any other industry, and those farms that continue to produce on a smaller scale are not supported or valued by this system (Lyson 2004). Farmers in this system lose their independent decision-making ability and work under corporate contracts, carrying out the highly mechanized and centralized operations mandated by those contracts for the purpose of high productivity and efficiency; while production is on a massive scale, growers and suppliers are fewer, and supply chains in rural America are declining. Agricultural policies at the national and state levels are focused on commodities, and farmers who grow non-commodity crops are “shut out of farm subsidy programs” (Lyson 2004, p. 101). This is not an agri-food system that values the work of farmers who grow in a way that is rooted in generations-old knowledge systems, in the context of the ecosystem, or in the community; thus, it is not surprising that most parents, Hmong and American, do not urge their children towards farming, even if they hold deep knowledge and appreciation of the practice. Long Yang pointed to the problem of public perception of farming as well: “I think it's hard for farmers. They don't get a lot of recognition or acknowledgement... so it's hard for people to make a living off of farming” (Interview with Long Yang).

## 2. An honest occupation

Although the context of American culture uproots many obstacles for those pursuing farming, proponents for farming within the Hmong community point to values inherent to life as a farmer that are not characteristic of other, more stable career paths. These motivations for farming persistence, even in the face of the challenges of this context and the pressures of “modernization” are important findings regarding my research question of what it means for the Hmong in this context to persist in their farming practices. Two middle-aged men who I interviewed, Phillip Yang and Joe Vang, provided nuance to the exploration of Hmong adaptation to American working life and farming persistence; they point to the possibility of being involved in both the “modern” working world and in farming—the two are not mutually exclusive. Joe Vang and Phillip Yang, the distinction between traditional Hmong and American working culture is not as divisive as some “traditional” parents see it; their views represent significant links between traditional Hmong practice and modern American life, illustrating that the adaptation of Hmong farming to the Providence context is not simply something to help the older generation cope with their forced migration to this country. While both of these men hold “modern” jobs that they enjoy (in computer technology and architecture), they value the fruits of farming as a greater accomplishment than a paycheck at the end of the week or a bonus at the end of the year (Interviews with Phillip Yang and Joe Vang):

There's a sense of pride that you come home and you bring some food, some vegetables to your kids. (Interview with Phillip Yang)

They articulate that farming is as an “honest” occupation, a lifestyle that is directly related to health, and an expression of culture (Interview with Joe Vang). It feeds a person on a deeper level than providing a paycheck and embodies the Hmong value of good, hard work. However, in the context of American working life, these Hmong cultural values of work do not easily translate, and it is hard to see farming as a feasible option. According to Phillip Yang, many more Hmong people would farm as a business if it were an accessible and viable option in the US:

I see that a lot of people think in my community, if they have the opportunity to do farming as a job, they do it. And they will love to do that. The younger generation, we don’t do that because it’s the timing that we’re going out there. If we can get some land, or if anybody can give us as a job to do farming, I’m sure that there would be people that would be wanting to do that, versus to go work in the factories and then come home. (Interview with Phillip Yang)

For some of the older growers, farming isn’t just an “honest” occupation, a persistence of culture, or a means for subsistence; in the words of one grower, “farming is my happiness” (Interview with Kia Yang). Similarly, Vue Yang spends countless hours on her backyard and community garden plots, in addition to holding a medical job, because:

She loves it so much. By this [harvest] time she gets what she wants, she achieves what she wants—she’s got corn, peppers, some vegetables... Once a year that’s all she’s looking for, you know? (Interview with Phillip Yang)

For these growers, a way of life that excludes farming is unimaginable because farming is what they love and it embodies their cultural values of hard work and achievement—this is why it matters for them to continue to face the challenges of continuing this lifestyle in Providence. However Kia Yang observes that her children do not find happiness in farming like she does:

Right now I don’t see any younger Hmong people doing gardening. It’s like they don’t like it, they don’t want to be dirty. Sometime I told my daughter to go to the farm with me and she go, but she said “oh, I’m scared of bugs!” and she stay in the car, watching me do it. She never go there! And my son always told me, “Stop doing your farming! You’re getting old and you need to stay home with my children!” So I told him “You can’t mess with my happiness. I like to do it. I don’t want to sit all day with your children or I will go insane! It will be boring! (Interview with Kia Yang)

Joe Vang notices the same trend that young people don’t want to do the “dirty work” of farming. Raised in a culture that does not value manual work, the American-born generation is increasingly alienated from the land. These findings are consistent with those of Margaret Brady (2011) in her research on Hmong farming in Anchorage, Alaska; young interviewees enjoy the fresh produce that comes from their family’s garden but they “hate the part of having to do the work.” In this study, the older women in the

community were the main gardeners, and usually “nobody really helps.” Brady found that parents do not make garden assistance mandatory for their children, which I found to be true in this project as well. She argues that gardening in this country is seen as more of an optional rather than an obligatory pursuit as it is not the only source of income and subsistence; it is seen as more advantageous for youth to invest their time and energy into their education rather than farming (2011).

Mr. Vang, however, emphasized the positive outcomes of his involvement in the farming community as a teenager. He spent his adolescence working for his sister at her farmer’s market stand in Wisconsin and, after learning a lot about hard work and about Hmong farming and cooking through this experience as a teenager, he urges young Hmong people to work with their relatives at the farmers market if they have the opportunity:

Because you get dirty, you learn to say ‘dirty is good.’ You don’t have nice clothes on, you learn to say ‘oh, I’m wearing work clothes, working clothes are good,’ you know? It’s an honest occupation and you learn to accept that.

(Interview with Joe Vang)

Joe Vang wants to “break away from those cultural and traditional bonds” that see farming as an inferior livelihood in the US; he seeks to encourage his daughter and the rest of the young generation to keep farming in the Hmong way. Mr. Vang urged his daughter to work at the farmers market with her grandparents because “farming teaches you skills you don’t learn by working in retail selling GAP clothing” (Interview with Joe Vang). When his niece asked him to review her resume, he asked her why her work at the farmers market was not listed, and he advised her to add this work to her resume because it shows a “consistent...hardworking value.” Mr. Vang is a parent who wants his children to seek what fulfills them in their occupations:

I see the value of farming and the values it taught me, and I want to pass that on to my own children. And so I recently, I’m in the process of trying to take one or two acres of my land out in Johnston and cultivate it for my 11-year old... the idea is to do strawberries. So she will team up with her grandma and both of them will grow strawberries. (Interview with Joe Vang)

Through this experience Mr. Vang hopes his daughter will learn the “hardworking value” of farming and have the opportunity to benefit from her grandmother’s expansive knowledge about farming and running a business. Phillip Yang has similar aspirations; as President of the Hmong United Association of RI, he wants to find funding to teach young people about the Hmong way of farming, and to promote farming as a livelihood among the younger generation.

As a farmer, once a year you’re looking for your crops, your animals...they’re raised and they got big, the way that you think this year is supposed to be. And your crop of corn, rice, vegetables, it’s endless...That is why you’ll be happy with yourself—you achieve what you want every year. (Interview with Phillip Yang)

He contrasts this with the outcome of a typical “American” job:

“You work every 12 months and by December 24 you get your bonus from wherever you work and, if you get a good bonus, then that will be your achievement. Say, I work so hard and this is my reward. You work as a farmer, your reward is in August and September, that all your crops are full in the field. You are so happy with the way that it turned out, you know? You’re not only happy just for yourself but you can share with the entire family, and your community. You can give it out. That’s what you achieve, you give it out. As a person that lives, you want to save life. You want to share your crops with other people.” (Interview with Phillip Yang)

The importance of using the harvest to share with and care for one another supports Kathryn De Master’s findings in the Hmong gardening community in Madison, WI that sharing their “abundant yields within the Hmong community” demonstrated “cultural mores regarding generosity” (2003, p. 95). I experienced the generosity of the Hmong on a weekly basis throughout this research; each time I visited the garden or helped with work on a farm, I would be sent home with enormous amounts of produce and instructions for how to prepare them. My freezer is generously stocked with chili peppers for the winter, thanks to Kia Yang. I enjoyed several delicious meals with Phillip and Vue Yang who graciously welcomed me into their home and made me feel part of the family. On a day when I wasn’t feeling well Chang brought me back to her house and cooked dinner for me using medicinal herbs from her home garden. George and I watched Hmong news broadcasted from Fresno, CA on his laptop as Chang busily chopped herbs and boiled eggs in the kitchen for a nourishing dinner. She sent me home with a bundle of herbs, along with instructions on how to boil them with eggs for breakfast in the morning, and then to prepare a tea at bedtime for the next three days. I soon felt much better thanks to her kind caregiving. The careful and diligent work of the Hmong in their gardens and farms produces vibrant



A generous basket of farm-fresh produce I received from Chang and George Xiong—just one of the many they shared with me during the season.

abundance, which they freely share, enriching the lives of those around them. George Xiong's words of invitation to me summarize the generous hospitality of the Hmong well: "Eat, drink, relax."

### 3. Being Your Own Boss

For older Hmong who choose to farm as a business, this lifestyle allows them to regain some of a sense of freedom and autonomy that they lost when they came here, feeding their spirit of independence. Mee and Wang Yang emphasized that when you are a farmer "you don't have no one who will control you"; this issue of freedom and control was a huge challenge for them upon arrival in America (Interview with Mee and Wang Yang). Although this country "is freedom," in a sense, the barriers created by language and technology proficiency have left Mee and Wang feeling controlled by this society, a sharp contrast to "back in our country" where "you can just go out farming your own land and you don't have to worry about making any money to have a living" (Interview with Mee and Wang Yang).

Although working the land is a difficult way of life, for growers who choose to farm as a business it is highly preferred to working under the command of someone else. Since starting her farm business, gaining freedom that was absent in her former job in a jewelry factory was a key advantage for Chang Xiong. Coming from a society where families made their own decisions and orchestrated the growth of expansive farms back in Laos, building a life in the US where she could continue to make those decisions without oversight made running a farm business appealing for Mrs. Xiong.

When you farm you're responsible for all things, you know? You have to buy the seed, the compost, you have to weed, you have to plant, you have to pick up, you bring to sell. You think hard, right? It's very hard. You should be patient. If you're not patient you can't farm, you know? Different working at the company, company they have their own boss...When you farm you are your own boss... You want to farm, you should know something like that! (Interview with Chang Xiong)

For Chang Xiong, "the business has made me happy," allowing her to come and go when she pleases, to determine which crops to grow and sell, and to plan each day according to the responsibilities she has created for herself. This has also allowed Mrs. Xiong and her husband more flexibility in caring for their grandchildren, something that is very important to them as a Hmong family. In this way, Chang Xiong's successful and profitable adaptation of her farming knowledge has allowed her to realize Hmong values of independence and self-sufficiency in this country; rather than spend her entire life working in a job she does not enjoy, answering to an upper authority, she operates her own business based on something she loves and a skill in which she excels. Although life in American cities such as Providence is in stark contrast to the rural autonomy of Laotian life, securing access to land and building a farm business has enabled Chang to enjoy some of the same freedom in her choices and daily life as she did in Laos.

Charlie Xiong started his farming business not necessarily out of a love for farming, but because a stomach ulcer and recurring migraines forced him to quit his job in a factory where he made plastic plates; the factory was soon shut down. In some respects he would prefer to have kept a factory job where he earned an income and didn't

have to “apply for any kind of assistance or anything like that.” However, like his sister-in-law Chang Xiong, he appreciates the freedom of farming:

I like to start the farm business better because we have time to work and we have time to rest, like that. Be your own boss so nobody boss you around. You want to work, you work. You don't want to work, just go on vacation, like that. (Interview with Charlie Xiong)

Charlie Xiong and his wife Kia Xiong also appreciate the freedom that their daily schedule allows them because they are able to care for their grandson during the day; at just three years old, Eli enjoys learning to feed the chickens, cut down sugarcane stalks, and fill up flat tires. Through running their own farm business, the Xiong's have the time and the space to share their carefully cultivated knowledge of farming with their American-born grandson, who may otherwise not be exposed to this rich cultural tradition (personal communication with Charlie Xiong).

Gary Yia Lee (2012) argues that the American political and economic system has “contributed positively for Hmong ability to take the initiative in achieving entrepreneurial success” (p. 91). He highlights the Hmong cultural values that this speaks to—“desire to compete” (sib twv) and the drive “to excel and improve one’s living conditions” (sib twv ua neej). He ascertains that adapting and excelling in the capitalist climate of the United States, a kind of migration from one life-stage to another, is akin to the geographic migrations that were common to Hmong life in Laos, as families were always searching for better land and improved farming conditions far from outside societies urging assimilation (Lee 2005, 2012). He highlights that the Hmong who started businesses in Laos were displeased with the socialist economy in Laos that forced them to work under cooperatives; they desired more freedom (Lee 2012). The enjoyment of the freedom that comes with entrepreneurship is evident in the community of Hmong market growers in Providence, however along with Lee’s assessment of the positive climate of business in America, it is important to recall that land access and knowledge surrounding the bureaucratic aspects of entrepreneurship can be challenging for growers, as noted in interviews with Phillip Yang and Charlie Xiong—being one’s own boss may be the ideal, but it is not easy to accomplish. Projects like the Urban Edge Farm and the Southside Community Growers are important pathways for providing opportunities for Hmong farmers, if they desire, to be their “own boss”; additional pathways supporting Hmong innovation and agency in their working lives should be explored.

### C. Farming in America: the views of Hmong-American youth

At the Broad Street market on Saturdays, three generations of Hmong come together, selling their produce and enjoying each other’s company—“everybody’s happy” (Interview with Thai Yang). As market growers often sell at several markets, most enlist the help of younger relatives—children, grandchildren, nieces and nephews—to help them run their market stands. Much like Joe Vang learned to appreciate the “dirty work” and the “hardworking value” of farmers through working at the market with his sister as a teenager, the individuals I interviewed at the market have gained a unique perspective on farming from their experiences selling their family’s produce. Pang Yang, a young woman who sells at the Southside Community Growers table with her mother and

grandmother, explained that the market is “a great way for family and community to come together” (Interview with Pang Yang). Long Yang agrees:

Farming is a good way to connect with your family, your parents...especially your parents because they can teach you a lot of things in the garden because they experienced a lot, it's their whole life, their whole childhood, so they can give you a lot of good pointers when you're in the garden. So you lose that opportunity when you're not farming. And you lose the opportunity of fresh food. (Interview with Long Yang)

Younger members of the Hmong community working with their families at the Broad Street farmers market admit that, when they were younger, they hated farming and didn't understand their parents' desire to continue the practice. However, now that they have experienced working at the market, they have great respect for farming as a livelihood, echoing the aforementioned comments made by Joe Vang (Interviews with Pang Yang, Thai Yang, and Long Yang). Learning about the vegetables they sell and seeing firsthand the amount of work that goes into farming gives them a great sense of pride in the accomplishments of their parents in this country.

Long and Thai Yang's parents run a farm business called Crispy Greens that operates out of several urban community gardens and a plot of land at a farm in Middletown. Long is outspoken about his desire for his parents to discontinue their farming, but working at the farmers market has given him a greater appreciation for his parents' work as farmers and about farming in general:

Before when I was around 8, 9, 10, my parents they were farmers and I don't know how much hard work they are doing so yeah you learn to appreciate the farmers, you learn to appreciate the fresh produce, even the produce at the store because even if those are different products than we sell at the farmers market, people there are still someone who is growing them and nurturing the plants so you still have to learn how to appreciate the food. (Interview with Long Yang)

Thai Yang works as a nurse's assistant and was not aware of the amount of work that goes into farming before he started helping his parents at the farmers market, and his ideas have shifted much like his brother's:

I didn't really know what are the steps and how hard is it to work, but ever since last year I started helping out my parents...packing, selling I really help them a lot. I learn that, you know, it's a good reward and it makes them healthier and they enjoy doing it. We enjoy doing it too. And you know, whatever makes them happy, we're happy with it to! (Interview with Thai Yang)

Beyond learning about the hard work of farming, Thai Yang believes that being connected to the agrarian tradition is important for the young generation in terms of cultural knowledge and persistence:

The positive is you know your roots, you know what your family and your ancestors they do...and how hard is it to do, and you learn and you respect. To me I think that when you farm a lot with your family and you spend time with your parents and stuff you just respect them more...like how could they do that everyday back in Laos and Thailand? It's hard work, its not easy work. (Interview with Thai Yang)

Long and Thai Yang hold realistic views, however, that their generation does not understand or embrace farming, and that this practice is likely to continue declining in the Hmong community. Long Yang does not believe that farming will be largely continued by the young generation of Hmong people:

It's dying. They think it's like the old days, hard work. Older adults they still do it because it reminds them of childhood but the younger generation say its the old way of living, so they don't want to do it no more, so that's part of the reason why its dying. (Interview with Long Yang)

He highlights the difficulty in making a living on farming, and the lack of appreciation for farming the work of farmers in the US. Although he sees great value in quality and freshness of locally grown produce, he doesn't see farming as a viable livelihood choice, "unless they could expand upon farming, like open up a restaurant and advertise for fresh produce... we could expand on that" (Interview with Long Yang). While Thai is a proponent of the continuation of the farming tradition, supporting his parents' farming while his brother isn't sure they should continue, he has doubts about the rest of his generation's interest in farming on a large scale, arguing that farming is not seen as a good opportunity in his generation:

You know over here it's the land of opportunity, there's a lot of opportunity and a lot of people don't wake up and be like, I want to be a farmer. They want to be nurses, lawyers, doctors...they want to do that stuff. Farming is okay, I like it, I enjoy it with my parents but later on I don't know, in the future I don't know. I hope to continue it, but the younger generation is just like more Americanized, they're just like "oh I can get it at the grocery" and stuff...It's a different generation. (Interview with Thai Yang)

Thai Yang emphasizes that there are many positives for Hmong youth and young adults to continue farming, at least for their own sustenance if not as a livelihood. He does believe that his generation will to some extent continue the tradition of tending backyard gardens in order to supplement their own families' nutrition and continue Hmong culinary traditions, since many in his generation have learned the basics of growing and preparing traditional foods. He says this will be especially true for him if he marries a Hmong woman, since young Hmong women still "pretty much already know how to farm" and often have their own garden because their mothers have taught them how to grow food. His vision of the future, however, is that "the younger ones they just grow up and be Americanized and they're going to lose traditional ways" (Interview with Thai Yang). Although Long Yang does not plan to grow food as an adult, and encourages his

parents to stop farming because it's "too much work," he does have a passion for cooking and thinks that using fresh, local ingredients in restaurants is a great modern application for their agrarian tradition—one that can actually make some money. He aspires to one day be a chef at his own restaurant (Interview and personal communication with Long Yang). His views support Margaret Brady's (2011) argument that simply farming is not seen as enough, socially and economically, for the younger generation; they want to study, earn degrees, and secure careers that are more economically advantageous than farming. However his interest in taking what he has learned about fresh produce and Hmong culinary traditions and turning this connection to his heritage into a lucrative career echoes Kou Yang's (2012) desire to find the "connections between Hmong past and Hmong present" (p. 165).

#### **D. An "old way of living": making farming relevant to Hmong youth**

Exploring why farming is or is not seen as a relevant practice to continue among the youth is an important component of the picture of Hmong farming adaptation in Providence. It appears that the deep-seated beliefs and meanings underpinning the Hmong farming tradition are largely at odds between the older and younger generations: to what extent is farming necessary, and what does it mean to farm? As Franklin Ng noted, "it appears that the younger generation of Hmong are likely to select a different path from that of their predecessors" (2008, p. 31). This generational division, and its implications for the future, is a source of worry for older members of the community. According to findings indicated by my interviews, most of these parents are not concerned about their children having the opportunity to make money, as they view livelihood options as varied and widely available in America; thus, the concern over farming practice "dying" in the young generation is significant because it reveals a connection to agricultural practice that is deeper than simply occupational. Concerns were tied more to their children's wellbeing, survival and health; worry about what would happen to their children if the Hmong had to migrate to another country were also mentioned, revealing that although the older Hmong are adapting to this context they still believe there is a possibility that their lives here are not permanent—the collective memory of migration is not necessarily seen as something of the past. Kia Yang experiences great joy in farming and is worried that the young generation may not continue to experience it as she does:

I think [farming is] good for everything. It's good for the culture, it's good for the community, they plant their own food and they love it. Not the young people but the...middle age. I thinking that maybe the little when they grow old like me they won't be farming over there, that's why I worry. (Interview with Kia Yang)

Chee Moua also expressed her desire to make sure her children know how to farm, so they can continue to benefit from the fresh, high quality food that fills their dinner plates and stocks their freezers thanks to her diligent gardening practice:

I have to tell them do that, for like you know not only today, tomorrow. I tell them...you have to learn. Anytime I do something or put the seed in there they have to go with me to put the seed in there. I have to teach them you know so I

make sure after...after my life's the end they know how to do! (Interview with Chee Moua)

To the older generation, farming is inseparable from culture, it is “both embedded and embodied within the culture itself” (De Master 2003, p. 86). Hmong culture emerges from being in tune with the cycles of the seasons, and the necessity of farming emerges from a history of transience and self-sufficiency (personal communication with Kia Yang and Phillip Yang). Phillip Yang explained that his parents and the other Hmong elders believe “farming is just one way as a culture for the young generation if they can keep it up,” so “they like to encourage the younger generation to come back and to grow stuff” (Interview with Mee and Wang Yang). Kia Yang notably pointed to the uncertainty of the future, wondering how the young Hmong people will eat if they ever have to leave this country and worrying that losing the skill of farming will lead to hunger in the future—an understandable viewpoint for a woman who had to flee her home country, and who grew up hearing stories of migration from her parents and grandparents (Interview with Kia Yang). In a similar way, Phillip Yang emphasizes the importance of holding on to the old traditions in conjunction with the adoption of the new ways of life:

They can learn how to live the way that 100 years ago we lived before, versus all the electricity, digital technologies going to them...I'm sure that technology will be better and better each year, but you should start to find out a second resource of how you are going to survive, because to survive you have to do farming. If you don't have a job in the city you have to move out of the city to go to work farming. To be in the city is not the only way to live. You don't have to live in the city to survive—you can go outside, you know? But you have to know how to do it. (Interview with Phillip Yang)

He also argues that during times of economic downturn, as we are currently experiencing, the skill of growing one’s own food is incredibly valuable, as it can save a lot of money (personal communication with Phillip Yang). Charlie Xiong too offered that it is a “good thing if [young people] know how to do a little farming in the future, if they don’t got a job it will help feed the people” (Interview with Charlie Xiong). Although many voices of the older generation are urging adoption of modern working culture and values, which is also a kind of survival strategy, voices like those of Kia Yang and Phillip Yang remind the younger generation of the wisdom and practicality of their agrarian heritage.

Since the younger Hmong who have grown up as Americans may not believe, as their parents and generations before them did, that life is necessarily transient, then the aspects of Hmong culture developed in the context of migration may no longer seem essential; namely, self-sufficiency in the form of growing their own food. In light of this difference in the young generation’s experience, a challenge for community elders like Phillip Yang, whose visions of leadership include educating and inspiring the young Hmong to farm, is to communicate the modern relevance and deep meanings of farming that would appeal to the young generation. As one Hmong woman explained regarding the New Year celebration, there is “nothing new and interesting” in many of the cultural practices, and “in terms of culture and traditions, these young people have no frame of reference” (Chou Vang cited in Vang 2010, p. 120). This particular viewpoint on the

New Year celebrations resonates with the intergenerational experiences of farming observed through this research; my younger interviewees spoke of learning to “respect” the “hard work” of their parents through their involvement with farming, but farming for them had no real meanings beyond staying connected with their parents and doing “what makes them happy.” But ultimately, farming for subsistence, and by extension farming as a business, is seen as “the old way of living” (Interview with Long Yang).

### Conclusion

My findings regarding Hmong perceptions of livelihoods and farming persistence supported Pao Lor’s comments that Hmong culture “is neither static nor stable” (Pao Lor in Her and Buley-Meissner 2012). Hmong in Providence demonstrated a range of views on the role of farming in modern life and what sorts of careers and livelihoods the Hmong should be striving for. Findings of this research also expand upon Pao Lor’s discussion of Hmong professional identities (2005) by exploring cultural views on farming in the context of modern American life, and what the continuation of farming practice within a modern context means. My findings demonstrate that, although most parents encourage their children to work hard in their education and to pursue stable modern professions, farming is still seen by many as an occupation (whether full-time or part-time) that instills “hardworking values,” economic benefits, and a great sense of achievement— maybe more so than that of a paycheck (Interviews with Chang Xiong, Joe Vang, and Phillip Yang). My findings support Pao Lor’s observation that “in daily life, those who possess qualities Hmong refer to as *nquag* (demonstrating good work ethic) are models for professionals today” (2005, p. 156).

Margaret Brady (2011) found in her work with the Hmong farming community in Anchorage, Alaska that “most people in the older generation do not view gardening to be essential as an activity for their children. Parents do not seem to expect children to continue the same activities that were done when they lived in the mountains of Laos. They are, however, pleased when their children join them in gardening” (p. 180). My findings supported this observation to an extent; no parents forced the practice of farming upon their children, but encouraged those of the younger generation to consider being involved at least in farmer’s market sales in order to get a glimpse of the “hard work” that is required by this lifestyle and the benefits it reaps in terms of health and quality of food. My findings add nuance to the assumption that young people have no interest in farming, as one young man who I interviewed spoke positively of the benefits of growing your own food, at least on a small scale, and expressed a belief that Hmong American youth may at least continue to tend backyard gardens in order to produce fresh, affordable foods that they grew up eating with their families. Young interviewees were, however, skeptical of the extent to which farming will be continued and passed down to future generations, and emphasized interest in careers more lucrative than farming. As Kathryn De Master found in her work with the Hmong in Madison, Wisconsin (2003), Hmong youth have “their own ideas and own ways of adapting.” She highlighted also that “the dominant system proves persuasive and coercive, and the imagination of new adaptive yet historically informed expressions of agri/cultural knowledge and practice will need to pay heed to these concerns” (p. 132).

Views expressed by Kia Yang, Phillip Yang, and Joe Vang about the economic benefits and the practicality of knowing how to grow your own food represent important themes to further integrate into research surrounding Hmong American identity and

livelihoods; they raise valid points on the money that can be saved and also the health benefits of growing one's own food and saving fresh produce for the winter. These lessons, they argue, should not be lost to the increasingly technological, modern Hmong American generation; I argue that these benefits provided by farming practice should not be downplayed in their relevance to modern professional life or excluded from discussions of economic opportunity and professional development among Hmong Americans.

## **VII. FARMING AND HEALTH: RESPONSES TO THE AMERICAN AGRI-FOOD SYSTEM AND PERSISTENCE OF HMONG DIETS IN PROVIDENCE**

Some Hmong families in Providence are finding new meaning in their farming tradition through their experiences of health and nutrition in America. An interesting finding of this research was that many Hmong families are shifting back towards traditional Hmong diets after the integration of American foods and dietary habits upon their arrival in the US led to negative health outcomes (Franzen and Smith 2008; Wieland et al. 2011; Goto et al. 2010; Vue, Wolff and Goto 2011). The ideas about health and nutrition held by the Hmong community are unique because they do not arise from authoritative systems of knowledge surrounding nutrition and health in the US. They arise from Hmong knowledge on food and health, and involve drawing from their complex and generations-old knowledge systems, and utilizing their traditions, rather than seeking dietary advice from American nutrition authorities.

Kia Yang explained to me that she used to eat lots of “bread, cake, cookies, things like that,” in replacement of traditional Hmong foods like vegetables, meat, and rice. She linked this change in her eating habits to feeling poorly, and looking “chubby” and “puffy”; she told me, laughing, that just as the yeast makes the bread rise and expand, these foods made her expand, and caused her to feel poorly, more tired. The changes she noticed in her body, and importantly her declining sense of wellness, inspired her to shift back to her traditional diet. She began incorporating more vegetables and eating less sugar, baked goods and processed foods. When she was diagnosed with cancer, her shift back to the traditional Hmong diet became even more pronounced, as she sensed a correlation between her cancer and the unhealthy, toxic environment she was living in. She hardly ever eats in restaurants—only when her children make her—and continues to prepare all of her meals at home or with friends in the traditional way. While her children urge her to stop farming to protect her body since she has overcome cancer, she implores them to understand that farming is what keeps her healthy and happy (personal communication with Kia Yang).

Kathleen Culhane-Pera, Cheng Her and Bee Her (2007) discussed diet with a group of Hmong adults with diabetes, and their interviewees described a healthy diet as consisting of boiled foods rather than fried, bland foods without too much spice, and avoidance of fat, sugar, soda, salt, alcohol, fruits, and sticky rice. In Lisa Franzen’s and Cheryl Smith’s (2009) research, informants described a typical Hmong diet as “rice, vegetables, and a meat dish,” with the same types of dishes being served for all meals and with dishes containing few spices (p. 177). Snacking was not practiced in Laos or Thailand and is not commonly practiced by older Hmong in America, since food shortages limited food consumption in their home country (Franzen and Smith 2009). Fruit was described as an appetizer or dessert often saved for special occasions and celebrations, not a regular component of meals as it is perceived as more expensive and less accessible than the staple traditional foods (Franzen and Smith 2009). My observations were consistent with these findings, as bowls of Asian pairs or sliced melon were often served before meals when I dined with Hmong families. Lisa Franzen and Cheryl Smith (2009) observed dietary transitions in the group of Hmong they worked with, including decreased rice consumption, more meat and fast food, consumption of

frozen and processed foods, and the introduction of bread, snacking, and desserts. Their findings emphasized that taste preferences differ between generations, with the young preferring stir fried dishes to boiled ones, and desiring higher levels of sweetness (Franzen and Smith 2009). Wa Vue, Cindy Wolff, and Keiko Goto (2011) confirm these findings of the transitions that have taken place in Hmong dietary patterns upon resettlement; they emphasize that along with the introduction of American dietary patterns comes decreased consumption of vegetables, fish, and whole grains, and they directly link these decreases in nourishing, traditional foods to the acculturation process. The differences in typical Hmong and American diets as described by the aforementioned literature are summarized in the table below:

<b>Typical Hmong Diet</b>	<b>American Dietary Patterns Introduced</b>
Boiled or steamed foods	Stir fried or deep fried foods
Meat on occasion	Meat every day
Vegetables as main component of meals	Vegetables as side items
Home-cooked meals the norm	Fast food, frozen, processed food common
Very little sugar; usually in fruit form	Refined sugar, desserts popular
No snacking	Introduction of snacking

### **A. Increased Meat Consumption**

Joe Vang explained that upon arrival in the US many Hmong felt that it was necessary to eat lots of meat to make up for all the times when it wasn't available back in Laos; this led to high levels of meat consumption in the Hmong community, echoing Wa Vue, Cindy Wolff and Keiko Goto's findings that, for many older Hmong, a history of insecurity of certain types of foods led to overconsumption in America where these foods, such as meat, are abundant (2011).

I find it that, coming from Laos where you ate more vegetables than you eat meat, meat was like a delicacy that was very rare, you eat like once a year...Then coming to the US there's so much abundance of meat that everybody wants to eat meat, and at first that was like wonderful...they're like wow...it's so much abundance of it, I have to eat a lot of meat to make up for all those times when I was back in Laos, where I just ate vegetables! (Interview with Joe Vang)

However he explained, "the thought has started to change that we need to go back to eating vegetables" because:

All those people who are eating meat, they're all getting sick. Like, high cholesterol, obese, and not enough exercise because they don't do gardening anymore, so the only type of exercise they get is when they go to work, whether its in a factory or in an office, it's just the movement at the workplace. When you get home you don't have a garden to tend to anymore so there's no type of, any type of exercise. (Interview with Joe Vang)

Vue and Phillip Yang have noticed the same shift. Phillip Yang has “seen a change in health from that,” explaining that “if you eat all these vegetables from the farm and it’s natural things, its healthy.” Vue Yang confided in me at the Glenham Street garden one morning that she has to grow “lots of vegetables” because her husband “doesn’t want to get fat.” It was Joe Vang’s mother-in-law, Chang Xiong, who first brought these issues to Mr. Vang’s attention, and he thought, “That was kind of strange, having an older Hmong person tell me that eating meat is not very healthy.” He called it an important “transition” and “shift” in thinking in the Hmong community that “must have took some convincing.” This realization that took root in his family caused them to start consuming many more vegetables and a great deal less meat; his mother-in-law shared her views on the American diet with her friends, and some agreed while others did not. But in their extended family, the foods they eat “have changed a lot”:

We hardly eat any meat, its all the vegetables that [Chang Xiong] grows, and also we stopped eating almost the grocery vegetables because of the fertilizer they use...because once you start eating organic you notice a difference either way.  
(Interview with Joe Vang)

Beyond the quality of organic produce, every individual interviewed raised concerns about the amount of chemicals (pesticides, fertilizers, antibiotics and hormones) used in producing both meat and produce in America. For many, this was a main motivator for eating less meat and growing their own food or consuming produce grown by family and community members.

### **B. Concerns about chemical-based agriculture**

When asked if he thinks there is anything unfair about food and farming in the US, George Xiong immediately answered, “I think the biggest thing is the fertilizer.” His wife Chang chimed in, “Chemicals.” George fears that these chemicals “will kill a lot of people.” They may kill pests, weeds, and disease, but “they will kill the people too.” Chee Moua explained that, the way most farmers deal with pest management, you can “put something to kill the bug, but now the food no good!” (Interview with Chee Moua). Kia Yang was similarly deterred from the heavy chemical use of conventional farming:

I had a cousin, she work at the farming over there, so I went with her sometime and see a lot of pesticides. And they spray for the tomato, they spray for the pepper, wow! I can smell right there! No way, I cannot eat this! (Interview with Kia Yang)

She is concerned that this method of farming indicates a lack of concern for the wellbeing of the consumer:

I told my children, when you go buy vegetables in the store you have to wash really good because I knew it...I knew what they do because they try to make money, they don’t care to kill people! That’s why I say I’m scared of that thing.  
(Interview with Kia Yang)

Phillip Yang also has concerns about the priorities and motivations of the agri-food industry in its fast-paced mass-production of meat:

Do you think they care about health in this country? No! Business is in this country! Money! As fast as I can raise chickens, any animal that I can put it into the market and give them as food to other people, it's fine. They don't think about, alright, we're going to raise this thing slowly so these animals are healthy, not given any chemicals, so people when they eat they will be healthy and live longer. (Interview with Phillip Yang)

The issue of chemical-based farming is more serious than long-term health concerns and questions of taste and quality; the Xiong's know three people who have died from exposure to chemicals while working on conventional farms, and one who was recently hospitalized after inadvertently inhaling chemicals, having been unaware of the hazards of the pesticides being used (Interview with Chang and George Xiong). When I asked Chang Xiong as a follow up to her comments if she thinks all these chemicals in our diet are leading to a lot of the obesity and disease she responded ardently, “I *know!*”

#### 1. Meat production: the “unnatural” growth of food animals

Industrial meat production in the United States is characterized by high fossil fuel, water, and topsoil consumption; animal confinement on a massive scale<sup>18</sup>; large amounts of waste; environmental degradation in numerous forms; and human health concerns related to widespread use of chemicals, growth hormones, and antibiotics (Horrigan, Lawrence and Walker 2002; Gurian-Sherman 2008). The Union of Concerned Scientists calls this method of meat production “unnatural and unhealthy,” an assessment that was echoed by many of my interviewees in the Hmong community in Providence who grew up raising animals in a radically different way in Laos (Gurian-Sherman 2008).

Phillip Yang, along with his parents Mee and Wang Yang, emphasized that the rate at which produce and meat grows is “unnatural” and “unhealthy”—we can use chemicals to quickly produce food that’s ready for the market, but “it’s very unhealthy” and a “big change” from the way farming was done in Laos. Phillip Yang explained how differently animals were raised in Laos:

It’s very hard because we had to, you know, grow your own animal, you have to raise your own animal, and every 12 months you get a little bit, but you don’t get a lot like this country. (Interview with Phillip Yang)

Although this was a more time-consuming way to raise animals for meat, Mr. Yang emphasized how much more healthy it is, and lamented that health is not the primary concern of food production in the US where many hormones and antibiotics are used in order to raise animals more quickly and “safely” in confined feedlot spaces:

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<sup>18</sup> Mass production occurs in facilities known as CAFOs or Confined Animal Feeding Operations, which UCS describes as “an unnatural and unhealthy condition that concentrates too much manure in too small an area. Public policy has supported the growth of this style of meat production, so that the industry is “dominated by a few large and economically powerful companies” (Gurian-Sherman 2008).

They don't think about, alright, we're going to raise this thing slowly so these animals are healthy, not given any chemicals, so people when they eat they will be healthy and live longer... these medicines that they give to the animal it will kill you eventually, and your life will not be long if you don't have these modern medicines. But back in our country, we don't go to the hospital. We live to 70, 80 years. We don't eat a lot of these meats that are raised by the modern medicines. (Interview with Phillip Yang)

Kia Yang echoed these concerns about the “unnatural” way of producing meat in the US, her concerns having been magnified by hearing firsthand accounts of a poultry farm where one of her cousins worked, leading her to seek out other sources for her meat, “farms where they have them running”:

I know we didn't do that in Laos! They eat grass all day, they all natural...But in here when you grow to feed...one of my other cousins he worked on one, not here, in Texas or Arkansas. They told me that the chicken they raise over there are, I think only two weeks or something like that, and they BIG chickens. When you see the chicken like that, when you go to the store they clean everything, look nice and you want to eat it. But when you go to the place they raise the chicken, I don't want to eat that! I can't even look. I say “I don't want to eat this!” But people don't know. Most of times when I eat the chickens, I buy from the farm where they have them running. (Interview with Kia Yang)

Because chickens raised on farms “where they have them running” are more expensive than those in the supermarket, she does not buy it as often, and therefore follows a more traditional pattern of eating meat on occasion rather than every day or even several times a day as is the norm in American culture. The way that these interviewees frame meat production in the United States highlights the complex struggles of the adaptive process of the Hmong to American culture, in coming “from a non-industrial culture to an industrial one,” and into a society where “an ideology of technological, governmental, and cognitive authority” is valued (Kathryn De Master 2003, p. 51). Views expressed by Kia Yang, Phillip Yang, and other interviewees highlight a selective non-assimilation to the part of American culture that values mass-production and cheap food without careful consideration of the externalities associated.

The Hmong view of industrial meat production should not, however, be characterized as altogether opposed to the dominant American system. Interviewees indicated that friends and relatives in other states such as Arkansas and North Carolina have started commercial chicken farms under the industrial model. For Hmong farmers choosing to farm in this way, this may simply be another mode of adaptation to agricultural practice in America, as entry into this kind of commercial production is supported by public policy that favors the industrial model (Gurian-Sherman 2008). In an article in *The American Prospect*, Monica Potts (2011) wrote, “In the early 2000s, chicken producers such as Tyson...began courting the Hmong” and many chose to go under contract with the large poultry corporation. Potts explained that, for many of these farmers, opening their own poultry farm “presented a path to success by being self-employed and self-sufficient”—echoing the motivations for farming observed in the

Hmong community in Providence. Potts explained, “It was a way to marry the values and skills many Hmong brought from Laos—farming and family—to achieve the American dream” (2011). However Potts highlighted in her article that industrial-scale poultry farming proved to be much more complicated than Hmong farmers anticipated; one farmer interviewed did not see the contract before signing, and the demands made by Tyson proved to be unclear and at times unreasonable, sending him into deep debt. Shane Tawr described his experience in the following way:

*It was not as rosy a picture as they painted the picture to be. There's a lot of expenses, and...the integrator [company representative] has their hands around your throat. They can squeeze it and suck the life out of you anytime they want to. You don't get to make any decisions. You either do it or you lose your contract.*  
(Potts 2011)

The case of Shane Tawr indicates that the experience of farming in the United States can be incredibly complicated for the Hmong, especially in rural areas unlike Providence where the pressure to farm on an industrial scale, rather than in urban community gardens, is prevalent. It is important to consider the particular standpoint of the Hmong in Providence and the significance of their resistance to large-scale farming and its outcomes; in Providence, organizations like SCLT and the Urban Edge Farm beginning farmer training program help create alternative pathways to market production for small-scale growers, options that are not available to all Hmong farmers. This example points to the benefits of supporting communities in autonomous small-scale production, which grants growers the actual freedom of choice that large corporations, as Shane Tawr indicates, falsely promise (Potts 2011).

## 2. Chemicals and Produce: organic and fresh preferred to conventional and store-bought

Several interviewees discussed the difference in the appearance and taste of organic versus conventional produce. George Xiong laughed that his vegetables are “not pretty”—not like the ones you buy in the supermarket, but they are safe to eat straight from the farm. We discussed this as we sat under the open-air shed, each with a massive wedge of watermelon, the sweet, sticky juice dripping down our arms after a hot August afternoon of harvesting peppers, tomatoes and eggplant—we were glad to enjoy this refreshing reward without concern of what else we were ingesting along with the fruit.

Even strawberry, pea pod, bean, like that...you just pick and then eat. At their farm you can't do that, you have to be careful. Cucumber, you can pick like this! Not pretty, it's bad, see? Because we don't spray chemical, but they're good!  
(Interview with George Xiong)

Charlie Xiong raised a similar point:

You see the commercial and the organic they so different, right? The commercial really beautiful-grow big! But the organic not really good, but safe for the eating! Every time me and my wife brought the one we grow here home...[my daughter-in-law] brought the one from store because it looks better! (Interview with Charlie Xiong)

Concerns in the Hmong community regarding the chemicals used in industrial food production highlight the awareness of the Hmong community regarding health and nutrition; this is not a community that needs intervention from an outside source on eating in a healthful way. Rather, there are guiding principles within their own knowledge system that helps them maintain their health and provide the satisfaction of preferred foods, supporting Kathryn De Master's (2003) assessment of the Hmong's "sophisticated understandings of nutrition" (p. 128).

#### *Eating right, the Hmong way*

Joe Vang has deep appreciation for the produce grown by his mother-in-law that keeps his family eating well; he lauds the rich quality of the farm fresh, organically grown produce and compares the difference between conventional and organic vegetables to the differences in low quality and fine wines:

For me I like to use the analogy where, I can never taste the difference between wine...people may taste wine and say this one is better than the other, but for me I can't. But somehow because I eat so much vegetables that she plants herself, I can see the difference and taste the difference. (Interview with Joe Vang)

Long Yang, who enjoys cooking for his family, also believes that produce from his parents' gardens tastes infinitely better than the produce from the supermarket, and the freshness is incomparable.

One night when I was cooking we had cilantro from the store in the fridge, and my Mom had just came back from the garden and she had fresh cilantro. I was going to cook the cilantro from the store because I didn't want to waste it, but...my mom said use the fresh one because it tastes better than the one from the store. And you can tell the difference. If you smell herbs from the store compared to the ones that we grow our herbs definitely smell stronger. (Interview with Long Yang)

Pang Yang voiced the importance of the garden space for her grandmother and her mother upon arrival in Providence, echoing Kia Yang's point that working at the garden and growing Hmong foods that were grown in Laos provides familiarity, comfort and enjoyment (Interview with Pang Yang). This point supports Kathryn De Master's assessment that "obtaining preferred Hmong foods would be difficult, if not impossible, were they not grown by Hmong agriculturalists persisting in their knowledge and practices" (p. 116). The dietary shifts observed in this research are enabled by the array of vegetables grown by Hmong families.

Chang Xiong often talked to me in the fields about the importance of keeping your mind and your body healthy, and taught me that this kind of holistic wellbeing is largely determined by the quality of the foods you eat and how you live your life—you must keep yourself "strong." Chang Xiong is determined to share her farming knowledge with others; she sees passing on her farming knowledge as a way of teaching family, friends, and the young generation how to stay well:

I'm 62. But you should eat right! That's why I tell you, today you come out here I show everything to you, I never secret right? I show everything for you, and you listen, and you do for your own mind and you keep your body good, you know?  
(Interview with Chang Xiong)

George Xiong chimed in, "I'm 70 years old, and I still do like this!" Mr. Xiong spends every day alternating between working on the farm and caring for his young grandchildren, with enduring energy, humor and good spirits that anyone would hope to have at his age—a testament to the importance of careful stewardship of not only the land but ourselves.

### C. Food preferences in the younger generation

Interviews supported aforementioned findings (Franzen and Smith 2008; Goto, Vue, Xiong and Wolff 2010; Vue, Wolff, and Goto 2011) that preparing meals to the satisfaction of both older and the younger family members presents a challenge and creates "intergenerational tensions" in many Hmong homes; while the older Hmong still prefer traditional foods and cooking methods, many younger family members prefer American foods and cooking methods.

Right now I can see that the young people, they not really eat the same food that we eat. When we plant the corn over there, the Hmong Asian corn, some children they don't like it, they say too sticky...but the American corn very sweet and its not sticky so they like that, and they like most of the American food. Only the older people they don't like to eat the American food, that's why they keep working [at the garden], or like I told you maybe they happy because they used to grow them in Laos, so that's good for everything for them. (Interview with Kia Yang)

Interviewees also mentioned that the younger Hmong do not enjoy bitter flavors found in vegetables like bitter melon and bitter ball, and many growers in the 1.5 generation choose not to continue growing these crops, supporting Kathryn De Master's (2003) finding that "bitter flavors do not appear favored" among the younger generations (p. 118). De Master (2003) highlights that, in her study, most youth enjoy both Hmong and American foods. This finding was supported in my research as well, as Hmong youth who I spent time with expressed appreciation for both Hmong and American foods. At the Hmong New Year celebration in October I enjoyed a fantastic (albeit sweat-inducing) meal of a spicy traditional Hmong noodle soup and papaya salad with the daughter of an interviewee, and she made various recommendations to me of her favorite Hmong foods that I needed to try. Another young Hmong interviewee expressed a desire to someday open up a restaurant featuring Hmong dishes using fresh, local produce (Interview with Long Yang). Still, the pressures of time and the appeal of convenience largely shape the dietary habits of the young generation (and some of the older as well).

#### *The importance of convenience*

Charlie Xiong summarized a common sentiment that American food is "fast, easy to cook" as opposed to Hmong food which is "too much work!" His daughter-in-law cooks for the family, usually sautéing or frying instead of using more time-consuming

Hmong techniques. “Hmong way, my wife have to cook it,” Mr. Xiong explained. He appreciates that preparing meals, like many other aspects of life, is “more convenient” and “easier than things were in Laos.” Convenience is emphasized especially by the younger generation whose busy schedules revolve around class, work, and spending time with the family. Thai and Long Yang, both in their 20s, have gained greater appreciation for Hmong foods through their work at the farmers market and enjoy family meals in the Hmong style as their parents prefer, but they still enjoy American foods.

[My parents are] not very big fans of fried food, they just like boiled or like stir-fry with like water or low cooking oil and stuff...they really cook some healthy food. And me, I just kind of like the fried food a little bit! (Interview with Thai Yang)

Long Yang highlights the difficulty of conforming to Hmong dietary habits, which mean hours spent in kitchen, in the midst of a busy work and school schedule.

[Young people] choose food by convenience, it depends on what we're doing at the time... So let's say for example I'm going to school, I'm late for school, I'm not going to cook a big thing...I know its unhealthy but I still need to eat and I need to be there to be on time for class. So yeah I think I wish I could do better at eating but...the way we choose food is about time, and cooking is a lot.

(Interview with Long Yang)

Although his busy schedule often determines the foods he chooses, Long Yang emphasizes that a great deal of time is still spent cooking as a family, and these family meals are characterized by “mostly vegetables, a little meat” because “we grow [vegetables] ourselves in our backyard.” Through farming, his parents help make sure that foods characteristic of Hmong cuisine are accessible and as convenient as possible; farming practice, therefore, means nourishment for their family. Chee Moua’s children, too, appreciate the vegetables that she provides for them, while they still request and enjoy some American foods:

They like American food but they like not too much because they like the hot dog...only like that. And they like my food more than that... because I make long beans...beans they like, and squash...Right now we got tomato, everything in the refrigerator. (Interview with Chee Moua)

Chee Moua also appreciates American-style food for its convenience and quick preparation, an important attribute for a mother of eight. Her favorite American food is salad, and she loves to grow large tomatoes not typically grown by the Hmong because she thinks they taste better in salads than the cherry tomatoes more commonly found in Hmong gardens. For the same reason she also prefers the smaller cucumbers grown here to the larger Asian cucumbers. She “learned from this country for salad” and enjoys that at American parties, no matter what the meal consists of, there is always a salad. Chee Moua expresses a view not shared by other interviewees that “The kids from the United States they grow farther because they eat good stuff!” This difference in viewpoint may

be a product of her younger age and her access to fresh produce, and also of her children's appreciation for what she cooks for them, which although she calls it "American," still consists mostly of fresh vegetables from her garden.

### Conclusion

Concerns regarding the American diet and the methods of food production in the US were vehement among interviewees. The process of the adoption of American habits by many, followed by the observation of negative health outcomes, and addressed by what Joe Vang called a "transition" and "shift" back towards traditional Hmong foods supports Milton Gordon's theory of acculturation as a "dynamic process" with potential for "bidirectional movement" between stages in which individuals are "obtaining, maintaining, and/or abandoning values at the macro and micro levels" (Gordon 1964 in Franzen and Smith 2008). Although many Hmong adopted American dietary values upon arrival, many have abandoned these values in favor of their traditional knowledge rooted in diverse farming practice and high vegetable consumption. These findings support Kathryn De Master's (2003) conclusion that "the extremely diverse, largely vegetable-based diet reflects sophisticated understandings of nutrition that have been developed over many generations to nourish the Hmong people" (p. 128). My findings indicate that persistence of the Hmong diet is being revived in some families as a response to the observed ill effects of the American diet, which contributes depth to De Master's (2003) observations. Findings of my research also challenge the assessment of Keiko Goto (et al. 2010) that "while Hmong families have a desire to preserve their traditional food culture, they are at the same time eating more meat and fewer fruits and vegetables for both financial and taste-related reasons" (p. 198); the Hmong I spoke with in general prefer Hmong foods and, because of their persistence in agricultural practice, view fresh vegetables as their most affordable food option.

Phillip Yang highlighted the potential of continued farming practice and consumption of fresh produce to "get their health back to normal." Farming not only provides fresh, high quality foods but allows people to "go at their own pace—you can do as big as you want, as slow as you want—go out and exercise yourself." Then, at the end of the season, "you achieve something that you grow, your health gets better, and you stay stronger." Mr. Yang stressed that this advice is for "not just only the older parents but the younger generations."

The findings of this research indicate that in Hmong culture health is conceptualized within the context of farming, supporting the study by Kathleen Culhane-Pera, Cheng Her and Bee Her (2007) which found, "There is no one Hmong word for exercise, perhaps because physical activity was a natural consequence of subsistence agricultural life in the mountains of Laos" (p. 185). For the Hmong, adapting to life in America without these familiar and culturally important agricultural spaces and practices is bound to throw them "out of balance" (Culhane-Pera, Her and Her, 2007). Importantly this study noted that the Hmong "sense their own body. And they listen to their bodies. This personal knowledge is necessary, given their assertion that every body is different...every body's balance is unique" (p. 184). The shifts noticed in this research also point to the importance of "personal knowledge" in decision-making around health, providing a strong counter-argument against the dominant mode of authoritative nutrition promotion in the United States (Guthman 2008). Perhaps US-based programs seeking to address health should seek more diligently to empower individuals' and communities'

knowledge of their own bodies, and incorporate cultural concepts of health and wellness, rather than to provide rules for how to and how not to eat and act in order to stay healthy.

Julie Guthman interrogates the notion of “if only they knew” as it relates to alternative food practice and choices, highlighting the “colorblindness” often present in alternative food spaces. In the space of nutrition and health, the findings presented here, especially the community-driven shifts in nutrition based on traditional knowledge, support Guthman’s suggestion that food discourse should turn “away from proselytizing based on universal assumptions about good food” and should “open up the space that might allow others to define the spaces and projects that will help spur the transformation to a more just and ecological way of providing food” (p. 395). The American concept of what constitutes “good food” need not emerge from a top-down mandate; communities like the Hmong in Providence show that there are rich systems of knowledge and practice that create and promote “good food” through fluid and adapting traditions of nourishment rather than through rigid and universalizing systems of governance.

## **VIII. SUGGESTIONS FOR FURTHER SUPPORT OF THE HMONG FARMING COMMUNITY IN PROVIDENCE, RI**

Considering the multifaceted ways that a life connected with farming feeds the Hmong community, especially the older generation, there is a strong case for the greater Providence community to work together with the Hmong to ensure continued access to farm and garden space and the necessary resources to mitigate the challenges faced by growing in this environment. For the young generation of Hmong Americans, ensuring that backyard and community gardens are accessible for their more practical motivations of supplementing their diets with high quality, culturally preferred and affordable produce, albeit in smaller amounts than their elders, is important as well.

There are several areas in which Hmong farmers interviewed in this project identified needs for improved access to resources and support; these will be detailed below. Beyond the benefits to be reaped within the Hmong community if these needs are supported, the larger urban and peri-urban agricultural community may also be enriched if a more widespread culture of knowledge and resource sharing is fostered. Groups like Southside Community Land Trust, who have been invaluable in assisting the Hmong thus far, may continue to be instrumental in developing a fertile farming culture in Providence that draws from and supports the many farming traditions and knowledge systems present in this city. With the support of groups like SCLT, the Hmong United Association of RI may be in prime position take action in making the improvements and aspirations that its leaders envision. As HUARI is organized according to Hmong customs, with clan representatives and elders, information and resources resulting from community partnerships may be most easily disseminated to the Hmong community through this group. Suggestions for supporting the Hmong and the larger farming community in Providence, as well as suggestions for groups like SCLT and HUARI that are working to connect farmers with what they need in order to be successful, will now be reviewed.

### **A. Needs cited by the Hmong farming community**

Charlie Xiong voiced an important point with regards to support for the Hmong farming community that should be emphasized before moving forward:

“I think Hmong people don't need to be supported. Everybody know how to plant themselves already...the Hmong people, the older than me like that, they know how to do it, the farm. Only thing that they don't know, how to put the chemical, and sometimes they put too much.” (Interview with Charlie Xiong)

Mr. Xiong's comment epitomizes the Hmong cultural trait of independence and self-sufficiency that has emerged from their unique historical and cultural context; farming knowledge held by the Hmong is vast and intricate, and over the past 30 years they have carefully adapted their farming techniques to fit this social and environmental context (Corlett 1999; De Master 2003; Lee 2005; Brady 2011). Returning to previous discussions of authoritative knowledge in relating to refugee and minority communities, “help” is not needed here (Goodkind 2006). What is needed is mutual learning and exchange of knowledge and resources, so that both the Hmong community and the greater Providence farming community may benefit from each other to create a

knowledge base that is both “deep and general” (Vandermeer and Perfecto 2013). There are some key areas, however, where interviewees mentioned specific needs.

### 1. Knowledge around soil and pest management

My findings indicate that there is fairly widespread use of chemical-based fertilizers and pesticides among older Hmong growers. Other growers do not utilize these products but are unaware of other options for alternative management of pests and fertility—their intensive intercropping practices keep pest outbreaks at bay or at least confined, but they do experience crop loss as a result of pests and cite this as a huge challenge. With the exception of Urban Edge Farm growers, my interviewees were unsure of how to maintain soil fertility of one plot of land year after year and are concerned about the quality of soil at the Hmong Community Farm, for instance. As the Hmong practiced “swidden” or slash-and-burn agriculture in Laos, maintaining soil fertility year after year is not part of their farming knowledge, and ensuring the fertility of the “old” soil in their garden plots was noted by many growers as a challenge. Observing the heavy amounts of chemicals used in the US by farmers to mitigate pest and fertility issues, both of which Hmong growers cited as much more severe in the US, older growers in particular may believe that chemical use is the only way to address these problems as an American farmer. Although Charlie Xiong emphasized that the Hmong “do not need support,” he did mention the lack of knowledge among the older generation on chemical-free methods of soil fertility maintenance and pest management. Phillip Yang also noted this as a need:

“I think it can be improved by having some resources that can show the community how to grow a better way and not in a way that we can do a lot of using these chemicals for farming.” (Interview with Phillip Yang)

Kia Yang suggested that it would be helpful for the growers to have a farmer well-versed in the ways of maintaining fertility and managing pests organically in the US to act as an advisor to the Hmong community—someone they could go with questions or to consult them on a yearly basis for advice on maintaining fertility and addressing pest issues. For Mee Yang, moving back towards chemical-free methods of raising animals and produce on a large scale in the US is very important; she said it would be better if, in the US, “we could do it [the Hmong] way” in order to “save it for the younger generation” (Interview with Mee Yang). Mee Yang and other interviewees were extremely concerned about the long-term health effects of using chemical-based products on their crops and are eager to find alternatives to fertilizers and pesticides. Community garden growers mentioned that they have access to compost thanks to SCLT, but they were unsure how to access compost for their own garden and farm spaces.

Soil contamination was also a critical issue mentioned by Phillip Yang, and knowledge concerning the management of backyard gardens so as to mitigate these risks is needed. Mr. Yang voiced concern that, although many of the younger professionals in the Hmong community are aware of lead and other contaminants in the Providence soils, the older members of the community may have no idea, because they “can’t see it.” Beyond access to *knowledge* that these contaminants exist and pose health concerns, access to the *resources* necessary to avoid contamination may be a challenge for low-income families. Resources such as lumber for raised beds, landscape cloth, and compost

recommended by SCLT for building safe gardens in Providence may be out of reach for many families. Considering the resourcefulness of Hmong growers and their tendency to capitalize on every available space, backyard gardening is unlikely to stop, so knowledge and access to resources in order to address dangers of soil contamination are needed in this community in order to support healthy, widespread agricultural practice in the Hmong community.

## 2. Land

All growers I spoke with mentioned the common desire for more land for the Hmong farming community. Mee and Wang Yang reported that there “is not much land out there” (Interview with Mee and Wang Yang). More space is desired to grow their crops and, in conjunction with more land, access to equipment is needed to ease the burden of doing all farming tasks manually, something that is increasingly difficult for many elderly growers (Interview with Mee and Wang Yang). The issue of space is especially important for those who want to grow for the market; Phillip Yang said that if more land and opportunities were available for Hmong people to grow for the market, “they will love to do that” (Interview with Phillip Yang).

As President of HUARI, Mr. Yang aspires to find more land for the Hmong community so that those wanting to grow for the market can have more space on which to grow, and so that young people can start farming like their parents and grandparents, an idea that will be discussed in greater detail later in this chapter. Opportunities to acquire more land for very little money need to be explored, as the HUARI budget is limited. The City of Cranston leases the land being used for the Hmong Community Farm for just \$1 per year, and any new land opportunities must be similarly affordable in order to be accessible for the community. Exploring willingness of area farmers to lease unused land within their own property may present opportunities for helpful partnerships, as the farmers of Crispy Greens have benefited from such an arrangement.

## 3. Funding

Funding is needed at the Hmong Community Farm for a generator to pump the water, but there is no available money in the HUARI budget to purchase one. Money could also enable HUARI to purchase tools and equipment to be used communally at the Farm. Additionally, Phillip Yang and HUARI would like to obtain funding to start education programs for youth to learn about Hmong farming and other aspects of Hmong culture and tradition like language and dance. Kia Yang proposed, “Maybe we don’t have lots of money, we have to go find”—making more connections in the community could help provide the funding and support they need in order to make the improvements they desire. Also, paying someone to plow the land at the Hmong Community Farm was cited as a need:

“The Hmong people used [the Community Farm] 30 years now. We have a problem because we don’t have money to pay the tractor to plow really good, we only plow one time a year to plant the corn, that’s why the vegetables not grow really well, only the corn grow... the soil not turned very deep” (Interview with Kia Yang)

Growers at the Community Farm turn the soil mostly by hand as they did back in Laos, but this is tedious work, especially for older growers, that would be made easier with access to equipment through a sharing situation with other farmers or through access to funding to purchase equipment for HUARI to be used communally. Kia Yang also mentioned the need for compost but a lack of money to bring it in:

“So I think nobody put the compost over there, we don’t have money to pay for people to bring compost over there...So the soil over there you know the edge, near the woods, not that great anymore, only in the middle. The edge not that good because the soil too dry so I keep thinking that if we had money we have to go find somebody to bring lots of compost to put around, maybe the soil will be more rich. But maybe 20 years from now, maybe it’s no good. That’s what I worry about that!” (Interview with Kia Yang)

Funding for bringing in compost would be helpful; alternatively, farmers well-versed in compost systems could teach farmers at the Hmong Community Farm how to construct and use their own systems, as this seemed to be a common knowledge gap among Hmong growers, being a skill they have never needed in the past.

At the Flats Mentor Farm in Massachusetts, older members of the Hmong community mentor the young in how to farm ([FlatsMentorFarm.org](http://FlatsMentorFarm.org)). The program has gleaned support from Heifer International, University of Massachusetts Amherst, the Society for the Promotion of Agriculture, and the USDA, among others. Correspondence with this farm could be of assistance for Phillip Yang and HUARI, as Mr. Yang has a strong desire to implement a similar initiative:

“I’d like to get some land outside the city that we can give to the community, for not only just the older parents that like to do farming but the younger generation, teach them how to do it, and so that way as they grow they can know how to do it and save themselves and know how to do, save their money, eat healthy, live healthy.” (Interview with Phillip Yang)

As the experiences of young Hmong people involved in the farmers market seem to be highly positive, engendering respect and understanding for farming as a livelihood and encouraging further youth involvement in the farming community through mentoring and education programs would be worth support, but funding and land are needed to make such programs possible. Perhaps an educational farming program geared specifically towards the younger generation, where they could experience along with their peers the relevance of farming in today’s American society and have a sense of ownership over the progress of the farm, would glean a more positive response than simply accompanying their parents to tend their families’ gardens, as my observations were that young people had little interest in accompanying their parents to farm and garden sites (with a few exceptions). In addition to having older Hmong farmers mentor the youth, linking young farmers from the Providence area (of which there are many) with the program for additional mentorship may be beneficial in demonstrating the relevance of farming in the young generation.

## **B. Fostering knowledge sharing and mutuality in the greater farming community**

Kia Yang stressed that, without a young generation of farmers, the Hmong growers in Providence are left unassisted, unlike any generation of Hmong before them.

“We don’t have helpers because all the young children they don’t help us to farm anymore, that’s the old people farming. That’s all we got, the land, but nobody has ideas...we have no helpers.” (Interview with Kia Yang)

Findings of this research illustrate that collaboration among the various cultural communities involved in the Providence farming community has been instrumental in growth and learning, particularly since the Hmong in Providence are removed from the physical and cultural context where dissemination of knowledge from generation-to-generation was sufficient for farming adaptation.

Several interviewees highlighted the fruits of intercultural exchange in the farming community (Interviews with Phillip Yang, Charlie Xiong, and Chang Xiong). Through knowledge exchange between Hmong, African, and American growers and consumers, all sides have learned of new techniques and new crops. These relationships have been beneficial to market growers like Charlie Xiong who, through interaction with different consumer bases at each market, has tailored his offerings at each market to the specific cultural preferences of its shoppers. At the Urban Edge Farm, Pak Express Farm and Xiong Farms have both grown as businesses in close interaction with nearby American farmers, and exchange regarding the best crops to grow for the market and on farming techniques has been mutual and helpful in this setting. The Urban Edge Farm community has been an excellent resource for providing these Hmong growers with knowledge that they do not have—how to manage pests and soil fertility using organic methods and how to operate a business in the US. The program values the well-established Hmong farming tradition by providing land for expanded production and creating a community of knowledge exchange, filling in the gaps in practical knowledge where necessary.

While there are areas in which Hmong growers need assistance, they also have great knowledge and skills to contribute; findings of this research support Jessica Goodkind’s (2006) assertion that the focus of work with refugees should shift from “helping” to “mutual learning,” therefore minimizing power differentials while benefiting all sides through valuable knowledge exchange; efforts of outside authorities to “help” refugee communities typical of resettlement programs have proved themselves to be paternalistic, unhelpful, and poorly received, so an approach based on mutuality may remedy these shortcomings and lead to communities of real support (p. 90).

For the young Hmong, linking their older Hmong community members with the greater Providence community (which they feel equally a part of) is important. Thai Yang highlighted that “people just got to reach out to the Hmong people more”—people need to be better educated about the Hmong community, Hmong culture, and what they have to offer. He suggested that the younger Hmong could play a key role in this kind of mutual understanding between the Hmong and the larger community—“we could help them translate and stuff like that”—since many of the older Hmong do not speak English and, if they do, struggle with local dialects. This idea echoes Goodkind’s (2006) point that, in addition to intercultural knowledge exchange, intergenerational knowledge

exchange too is an important contributor to Hmong wellbeing through the ongoing process of adaptation to American life.

### C. Suggestions for Southside Community Land Trust

Growers mentioned that SCLT has been invaluable in helping them secure land for gardening and farming. George Xiong recalled that Katherine Brown, former Executive Director of SCLT, played a key role for the Hmong in the early years of their lives in Providence, linking them with community garden space. SCLT's Urban Edge Farm program has been a key resource for Pak Express and Xiong Farms in developing their businesses, filling growers' gaps in knowledge surrounding organic amendments and how to run a business in the United States, with all the confusing paperwork that comes along with the freedom of being "your own boss." Community gardeners also find SCLT useful in accessing seeds—Chee Moua was surprised by the quantity and variety of seeds provided for free by SCLT. Both Phillip Yang and Charlie Xiong mentioned Rich Pederson, farmer at SCLT's City Farm, as a helpful resource for them in the Providence farming community who gives great tips on things like judging the progress of your corn crop and helping your Brussels sprouts to be productive.

#### *Rethinking educational approaches*

SCLT's education programs could potentially help close some of the knowledge gaps in the Hmong community concerning soil fertility and pest management, especially among older growers. Kia Yang mentioned the fish emulsion workshop at Glenham Street garden as a useful event, and she sometimes uses fish emulsion on her plants. However, the growers I spoke with do not seem to view SCLT as a source of advice or as somewhere they can go when they have questions about managing pests and soil fertility. This seems to represent a disparity between SCLT's goals and the reality of the community's awareness or willingness. Improved efforts on educating members of the Hmong community on organic fertilizers, pest management, and making their own compost would be positive steps, as these are techniques not part of traditional Hmong farming knowledge and still present challenges for them in this environmental context.

A grower mentioned that, one year, she used chemical-based pesticides to address some issues she was having in her plot in a community garden, and was told by an SCLT staff member *not* to use pesticides again; this approach by the staff member is understandable considering the philosophy of the organization, but it seems that this advice came across the grower as authoritative, and the grower is still unsure how to best manage pests *without* the use of chemicals. It seems that a more collaborative approach to learning about organic gardening is needed in the community garden setting and beyond, an approach that builds deep, common understanding rather than setting rules. As previously mentioned in this paper, there is fairly widespread use of pesticides by older Hmong growers in spaces outside of the community gardens; this reflects a lack of knowledge around the organic methods available for handling pest and fertility issues, as the same families voiced great concern over the long-term health effects of using chemicals—their use of these products is reluctant, but they are unsure of the alternatives.

An effective approach may be to have SCLT farmers work with and exchange knowledge with leaders of the Hmong community regarding these issues, and have *Hmong growers* spread the word among their community, since Hmong individuals seem unlikely to directly ask SCLT employees for information, or to visit their website for

educational materials. Rather, advice is more likely to be taken if it is coming from another member of the Hmong community; training and support for Hmong leaders in educating their community around these issues is something for SCLT to consider in its efforts to equip growers with the knowledge and skills they need to grow sustainably in Providence.

#### *Urban Edge Farm: a positive model of knowledge exchange*

The exchanges taking place at Urban Edge Farm should be fostered and viewed as a model for spreading knowledge within the farming community; Hmong, American, and other farmers at Urban Edge frequently exchange knowledge, and Hmong growers in this space have developed confidence in the areas of soil fertility and pest management without the use of chemicals, thanks to the nature of mutuality in this community. This kind of grower knowledge exchange could be a positive model to apply in community garden spaces as well, with greater emphasis on sharing and collaboration rather than positioning SCLT as an authoritative knowledge source or rule enforcer. Hmong growers here express their desire for others in their community to know about organic methods, so providing knowledge and resources for Hmong leaders in the farming community to share this knowledge beyond Urban Edge Farm would be beneficial. Although growers at the community garden know they're not *allowed* to use chemicals, interviewees were generally unaware of their options for organic pest management and fertility maintenance, especially in their personal garden sites where they don't have compost delivered each season.

Beyond the community gardens in the city, it would be helpful to have a network of farmers in the Providence community willing to visit sites like the Hmong Community Farm in Scituate to provide their insight on dealing with pest and fertility issues in order to reach a broader audience and develop a more cohesive urban and peri-urban farming network. The same could be true of equipment use; a network of farmers and sites with extra equipment or equipment they would be willing to loan out may help meet needs in the Hmong community for equipment, to ease the burden experienced by aging growers of always working the soil by hand. Pairing Hmong leaders with farmers who know how to manage pest issues organically and how to set up compost systems or rainwater harvesting systems, and then having Hmong leaders share this knowledge with growers in their community, may be an effective way to disseminate this knowledge. In return, there is a great deal that American growers can learn from the variety and techniques found in Hmong plots.

#### *Looking ahead*

As SCLT is currently working to develop a system of "hubs" in various neighborhoods in Providence, another look at knowledge exchange and mutual learning could be integrated into the vision for this program, with a focus on organic amendments, tools and equipment, and general farmer-to-farmer advice. If any Hmong farmers are willing, workshops on growing and using Asian vegetables and herbs, and on intercropping could greatly benefit the growing community in Providence. Additionally, the evolving Lots of Hope project should keep the Hmong community in consideration, and lots acquired could be potential sites for Hmong educational programs or expanded opportunities for Hmong market growers. In both of these initiatives, a focus on intercultural knowledge sharing should be focused on in order to facilitate the adaptation

of Providence's diverse agricultural knowledge systems through positive community collaboration.

As previously mentioned, Phillip Yang and other Hmong interviewees voiced a desire to link young Hmong people with farmers to learn more about Hmong farming and the importance of this kind of work. Mentoring within the Hmong community is certainly an effort deserving of support. In addition, sponsoring young farmers in the Providence area to speak to diverse groups of youth about what it's like to be a young farmer, why they chose to farm, and why this livelihood choice is relevant for the young generation is also an idea that might reach youth in a meaningful way, sense the argument of knowing your roots and continuing cultural practice isn't something that speaks to all young people.

SCLT has been a critical resource for the Hmong community ever since their arrival, linking them with space for agricultural persistence, aiding them in accessing not just land and resources but familiarity, community cohesion, culturally preferred foods, and a purpose in this drastically different social and environmental context. There are many opportunities for the relationship between SCLT and the Hmong community to grow and flourish in the coming years.

#### *Programs elsewhere in support of Hmong farmers*

Beyond Providence, a multitude of projects around the country are working to support the Hmong in their efforts to continue farming and accessing culturally appropriate, high quality foods in the way they choose. Some such projects include Flats Mentor Farm in Lancaster, Massachusetts, where adult Hmong mentor young Hmong and pass knowledge along to them just as generations before did in Laos; the Hmong Refugee Agricultural Partnership in Catawba County, North Carolina which "assists Hmong farmers in doing what they do best"; and New Entry Sustainable Farming Project in Massachusetts that supports farmers who want to enter into small-scale commercial agriculture. Ways to better foster a sustainable and thriving foodshed in Providence, enriched by the knowledge and expertise of the Hmong community and other growing traditions in the city, is territory in need of exploration. Work of programs across the country in this area, expanded upon in the table below, demonstrate progress in integrating farmers from diverse agricultural backgrounds such as the Hmong into the nation-wide community of small-scale farmers, providing assistance in areas such as business planning, marketing, alternative management of pests and natural resources, conservation, and processing, not to mention fostering invaluable mentorship networks within and across ethnic groups. Learning from and collaborating with other projects such as these could be helpful for SCLT and HUARI in continued work to bolster the diverse farming community in Providence, Rhode Island.

<b>PROGRAM<sup>19</sup></b>	<b>GOAL</b>	<b>LOCATION</b>
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<sup>19</sup> <http://www.flatsmentorfarm.org/about-us/>

Flats Mentor Farm	Assists refugee and immigrant farmers with infrastructure and marketing assistance; mentorship links younger and older Hmong	Lancaster, MA
Hmong Refugee Agricultural Partnership	NC extension service and NC A&T work to “assist Hmong refugee farmers in doing what they do best”; set up Growers School in conjunction with United Hmong Association	Catawba County, NC (United Hmong Association based in Hickory, NC)
New Entry Sustainable Farming Project	Range of training opportunities for beginning farmers from immigrant and refugee communities, including technical assistance, marketing, poultry processing, and business planning	Lowell, MA
Small Farms Team: Programs and Resources for Hmong Farmers	Extension courses and workshops for Hmong farmers on businesses and farm management, marketing, conservation and alternative pest, soil, and water management	Washington State University
National Hmong American Farmers	Connects growers to farm-to-school initiatives, local students, market opportunities; hosts a national conference; educates Hmong leaders on US Farm Bill; role in opening first Hmong owned slaughter facility	Fresno County, CA

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[http://www.refugeeworks.org/downloads/rwnews\\_32.pdf](http://www.refugeeworks.org/downloads/rwnews_32.pdf); <http://www.facebook.com/pages/Hmong-Refugee-Agricultural-Partnership- Program/100546340000517>  
<http://nesfp.nutrition.tufts.edu/training/index.html>  
<http://smallfarms.wsu.edu/immigrant-farmers/hmong-resources.html>  
<http://www.nhaf.org/>

## VIII. CONCLUSION

A wide range of deep and meaningful insights were shared with me over the course of this research, and the variety of topics that emerged in my inquiries on the traditional agriculture of the Hmong reveal the deep embeddedness of agriculture in my interviewees' lives and cultural heritage. Chang and George Xiong, Phillip and Vue Yang, and Kia Yang have been central mentors and informants for this project, my gateways to the Hmong community and gracious hosts of my participant and direct observation at several gardens and farms in Providence, Cranston and Scituate. During the growing season they unfailingly sent me home with a mouthwatering supply of produce from their gardens. Gaining this experience with the Hmong through my relationship-building participatory research greatly enriched this research experience, and I had the privilege of learning about important traits of Hmong culture as they were embodied in these individuals' lives. The rich knowledge-sharing tradition of the Hmong came alive through these families' eagerness to teach me about their perspectives on farming, cooking, and health. Their generosity was shown through the time and the food they happily shared with me. Their hard work and persistence is evident in the long hours they spend working the land and the pride they show for their harvests. Their self-sufficiency and adaptive capabilities are shown in the diversity and bounty emerging from their gardens and farms, and their use of homegrown medicinal herbs as both preventive care and as treatments for the sick. I hope the outcomes of this research will prove influential in inspiring greater support of the Hmong farming community in Providence through work towards an urban farming community based on knowledge sharing and mutuality, working towards a deep collective knowledge of how to farm sustainably in this environmental and social context.

### **A. In Review: meanings of agricultural persistence for the Hmong in Providence**

#### *Characteristics and challenges of Hmong farming practice*

Through my participant observation with farmers in community gardens, farms and backyard gardens, I observed that Hmong farming practice involves diligent work and intricate planning. Across the board, I observed in Hmong gardens intensive intercropping, successive plantings for a long and abundant season, use of organic matter and garden waste for mulch, sharing of seeds and other resources within the community, high species diversity with many varieties grown (both for food and medicine), and resourceful management of garden sites involving natural and re-used materials. Knowledge and resource exchange, an important part of Hmong culture, has begun to expand to include farmers and consumers from other ethnic backgrounds as growers in Providence produce and sell in an increasingly multicultural environment.

Challenges in managing pests and soil fertility without the use of chemicals presented the greatest challenge for gardeners, as these skills are not part of their traditional knowledge and difficult issues to navigate without proper understanding of the options available and the risks associated with the use of chemicals; this gap in knowledge represents an opportunity for knowledge sharing between farmers of different traditions, in order to foster across the board a more deep and general agroecological knowledge base. The likely contamination of soil in backyard gardens is also an area of concern regarding healthy, safe food access in Providence—do all families with backyard gardens know the appropriate measures to take to ensure that their homegrown produce is

uncontaminated? Lack of funding for irrigation and equipment at the Hmong Community Farm in Scituate was also a frequently cited challenge.

Despite these challenges, several Hmong families have tapped in to the surge of interest in local foods in Providence and are selling at several local farmers markets including the Hope Street, Broad Street, Armory Park, Goddard Park and Pawtuxet Village markets. Farmers market culture is often characterized by clientele who are interested in this “trendy” local foods consumption or who have the advantage of being able to choose more highly priced foods for their perceived reduced environmental impact, social benefits, or health benefits; these venues are often inaccessible and exclusive due to price and location, tend to be dominated by white shoppers, often lack culturally preferred foods, and fail to transcend the market system that situates food as a commodity (Markowitz 2010; Guthman 2008; Hinrichs 2000). In the Southside and West End neighborhoods of Providence, Hmong growers fill an important need as providers of affordable, culturally appropriate produce to Asian and African communities, particularly at the Broad Street and Armory Park farmers markets. While still operating within the market system, the improved affordability and culturally preferred offerings at these markets combat the tendency of farmers markets to be exclusive and “colorblind” spaces (Guthman 2008). The ability to grow enough produce for the market from just a few small garden plots illuminates the amazing ability of Hmong growers to produce a large amount of food from limited resources. The Urban Edge Farm training program was an invaluable training program for two families of farmers who note the importance of having assistance in navigating the sea of paperwork that comes with running your own business in the US; continued support in this area for farmers of any ethnic background looking to start a business, but especially non-native English speakers, is important.

As Alkon and Mares (2011) emphasized, however, work to support communities in securing greater control and agency over their food futures (or their *food sovereignty*) should not be focused on market-based solutions, as this does nothing to combat larger structural inequalities and power dynamics in our food system—the diverse farmers market culture in Providence, and the important role of the Hmong in this community, is an important step forward and an invaluable resource of culturally-preferred foods, but it is important to note that it does not demonstrate an ideal system of access and local control.

#### *Intergenerational tensions surrounding livelihood choice and cultural continuity*

Intergenerational differentiations emerged regarding the extent to which farming practice and cultural foods were sought after, but both older and younger individuals agreed that farming is important for the continuation of Hmong culture and for bringing families and the community together, and to knowing their “roots.” Youth working at the farmers market voiced the respect for farmers that they learned through working at the market with their parents, generally agreeing that farming is an important practice for their community. However young interviewees believed that farming is unlikely to continue among the young generation and, if it does, it will likely be limited to small backyard gardens to supplement home consumption with fresher, more affordable produce. Two key interviewees, middle-aged men, voiced a desire to reach out to the Hmong youth with programs for farming education, or with family activities showing their children the great achievement of producing their own food. Thus, views on farming and its role in the future of Hmong America were highly nuanced.

Inter- and intra-generational tensions were also pronounced with regards to livelihood choice in America, with American culture valuing capital-based rather than land-based work seemingly influencing thoughts of what kinds of livelihood pursuits are honorable and worthy of the investment of one's life and time. However nuances abounded in views of what constitutes good work, notably among three market growers and two interviewees trained in modern career fields who still find their greatest sense of achievement in an abundant harvest produced by their own hands, rather than a paycheck or a year-end bonus.

#### *The intersection of farming and health in the Hmong community*

Although US food culture and dietary habits are seen as "convenient" and "easy" compared to Hmong ways, and several interviewees prefer the quicker approach to cooking and eating, all interviewees expressed concern regarding mass production of meat and the amount of chemicals, antibiotics and hormones used in producing food on a large scale in the US. A key finding of this research was that there is a self-directed shift back towards Hmong dietary habits in several families in order to counteract the negative health outcomes of American dietary and lifestyle patterns that they have observed in their own lives; this shift is made possible through backyard gardens, community gardens, and farmland access, where they can produce for very little money the healthy and culturally preferred foods they desire and see as their healthiest option.

High meat consumption was perceived as highly problematic; it was seen as contributing to disease and obesity along with heavy consumption of sugar, fried foods, fast foods, and baked goods. Jobs that are inactive and confined to the indoors (such as the factory work that most had no choice but to enter upon resettlement) were also identified as contributors to ill health, along with a tendency of older Hmong to stay indoors and watch TV, unsure of what else to do in this starkly different social setting.

Hmong knowledge of health, as seen in this research, is deeply rooted in their agricultural heritage and emphasizes the wellbeing of both mind and body through eating lots of (chemical-free) produce and living an active and hardworking life. From the ground comes both nourishment and medicine, with plants and animals forming a foundation of traditional medical practice including shamanism and herbalism. Many families continue to grow their own medicinal herbs and shamans still play an important role in the Hmong community in Providence, their spiritual beliefs rooted in gratitude for what nature provides. For most interviewees, health is conceptualized as being multifaceted, both physical and mention/ spiritual, and rooted in Hmong traditions.

#### **B. Implications and applications for scholarship and community work**

The findings indicated by this research have various implications for both academic and community-based work; they speak to several interdisciplinary fields of research and provide insight into how the Hmong farming community in Providence (as well as the farming community in general) might be better supported in continued persistence and adaptation of their rich agrarian tradition. Overall, my findings provide nuance in the exploration of this particular Hmong community's adaptive process, supporting that Hmong knowledge "is neither static nor stable" (Pao Lor in Her and Buley-Meissner 2012). Future research may build upon the findings presented here by exploring in greater depth the possibilities for valuing the unique knowledge and skills of refugee communities in the resettlement process; by considering multiple epistemologies

in conceptualizations of nutrition and dietary advice; by exploring in greater depth how to support communities in increased control over their foodways; and by investigating more deeply the specific agricultural methods and techniques used by the Hmong and other communities practicing traditional agriculture, in order to contribute to agroecological knowledge base that is both deep and general, as John Vandermeer and Ivette Perfecto (2013) have called researchers to pursue.

#### *Considering refugee resettlement and acculturation*

Jacob Hickman (2011) concluded in a dissertation on Hmong morality and personhood that, in the process of resettlement, "the result is much more than a unilineal shift from more-or-less Hmong to more-or-less American", rather the experience is nuanced and often fraught with multiple sets of meaning and ethics, especially for Hmong-American youth (p. 248). This research supported Hickman's findings, discovering that for Hmong families and individuals interviewed in Providence, adapting to life in America is a nuanced experience of adopting some American ideals, holding on to helpful Hmong traditions, and navigating the in-between where compromise and collaboration help people make sense of life in a new context. This is exemplified in the dietary choices of many families interviewed, as they have shifted *back* towards traditional Hmong diets after having adopted and observed negative outcomes of American dietary patterns.

Continued research around cultural continuity and persistence in refugee communities may help expand and complicate the commonly held institutional view that assimilation and acculturation occur in a linear progression; acknowledgements of the nuances within the resettlement and acculturation process may foster an approach towards resettlement that values cultural exchange and knowledge sharing for a more empowered process rather than a singular focus on quick job placement (often in low-pay, low-skill jobs) without consideration of the skills and knowledge held by refugees. As the case of the Hmong farmers in Providence shows, refugee communities have rich knowledge traditions that not only benefit their own communities when they are able to continue these traditions, but enrich the larger community as well, especially when spaces for intercultural knowledge exchange and collaboration, as seen in garden and farm spaces, is created.

#### *Considering nutrition education and health promotion*

This work revealed a self-directed shift in several families back towards traditional foods and dietary practices in response to observed negative health outcomes of more Americanized dietary choices that were mainstream during the acculturation process. This shift calls into question the ideology behind the common interventionist approach to nutrition education that assumes people need to be told by authoritative sources the appropriate foods for their health (Guthman 2008, 2011). As mentioned in the literature review, an interventionist approach to health and nutrition is often seen as necessary when interacting with refugee communities.

The Hmong case observed here points to the necessity of reframing the interventionist approach and its ideology, especially as it pertains to refugee and minority communities, exploring instead possibilities for knowledge-sharing and mutuality in ways that empower and value the knowledge and food cultures held by refugee and minority communities. In Providence, gardening and farming provides culturally

preferred varieties of foods and medicinal herbs, therefore playing an important role in enabling Hmong families to tend to their own health through their own knowledge and skills. Further research in the ways that the Hmong in other areas (as well as other minority communities) conceptualize their health and mitigate negative health outcomes (as seen in the study by Culhane-Pera, Her and Her 2007) is an important area for continued research.

### *Considering alternative agri-food movements*

The movement for sustainable agriculture in the US contains many different threads, woven together by “visions of what a transformed agriculture might include” (Hassanein 1999). The Hmong agricultural tradition, since their arrival in the late 1970s and early 1980s, is part of this tapestry of knowledge systems and approaches; their continued farming practice in the US meets “culturally specific needs for the Hmong as an immigrant group not addressed by prevailing industrial agriculture” (De Master 2003). Although the Hmong can be seen as practicing farming in a way that demonstrates agroecological and sustainable practices, as well as aspects of food sovereignty, food justice, or community food security (as discussed in the literature review), it is important to emphasize the following point by Kathryn De Master (2003):

None of these research findings indicates that the Hmong agriculturalists identify themselves part of an effort to intentionally change the prevailing food system; rather, they currently operate outside it to address their own interests and should not be co-opted into movements in an attempt to incorporate an “indigenous” knowledge perspective or increase the diversity of movements in question.  
(p. 122-123)

De Master also emphasizes that moves towards supporting and learning from Hmong agriculturalists “must be grounded in notions of knowledge exchange and mutuality” instead of “potential extractive, cherry-picking activity” that often occurs in discourse and practice related to indigenous forms of knowledge (p. 123). So, in ways that encourage mutuality, community work should continue to support agricultural persistence among the Hmong and other groups “with an eye toward overall agricultural sustainability” so that various groups may continue to “meet culturally specific needs...not addressed by prevailing industrial agriculture” (De Master 2003, p. 122).

With respect to the food sovereignty movement, the case of Hmong growers in Providence highlights the benefits of community control over at least a portion of its food access, in terms of affordability of culturally preferred foods, access to chemical-free produce, and the ability to mitigate negative health outcomes through growing their own food and actively working outdoors to better their sense of mind and body wellbeing. Community work to provide access to land, tools and other resources is aligned with how Alkon and Mares (2011) describe the foundation for food sovereignty work, and this foundation should be built upon in order to place greater control in the hands of the community in controlling and choosing their foodways; work done so far by SCLT and the Hmong community is a positive example of how other diverse urban communities might support their diverse peoples in building greater sovereignty in the food system, with the goal of finding ways to oppose on a larger scale the structural inequalities in

access and power that Alkon and Mares emphasize is key to truly demonstrating a food sovereignty approach (2011).

In terms of furthering agroecological research and work, the potential value of intercultural knowledge exchange in Providence is high, as Hmong growers offer expertise in tending biologically diverse gardens that produce varied abundance throughout the season. Intercropping is a key component of Hmong agricultural practice and the techniques they employ may help other growers learn how to combine multiple species in a way that does not quickly degrade the soil and in a way that fosters the growth of all species present in the agro-ecosystem. American and other growers offer experience in pest management and fertility maintenance specific to this social and environmental context that, through mutual exchange, may help the Hmong learn how to manage the unique challenges of soil fertility and pest management that characterize agriculture in America and in an urban setting. By encouraging collaboration between the diverse systems of agricultural knowledge and practice in Providence, a richer knowledge base of growing in this environment that is both “deep and general” may be cultivated (Vandermeer and Perfecto 2013).

### *The future of Hmong farming in Providence*

Providence is a unique setting where urban farming is established and growing, where consumers across demographics are interested in fresh, locally grown and cultural foods, and where groups like Southside Community Land Trust continue to expand the scope and depth of their provision of resources for urban and peri-urban growers. And in this city the Hmong, now established members of the Providence community and American society, continue to practice rich cultural traditions that foster their own community cohesion, health, and wellbeing, and contribute unique knowledge and skills to the larger community.

At Glenham Street community garden, living walls of long beans rise to create a haven of sustenance in the middle of the urban neighborhood, and bitter melon blossoms hold the promise of something both new and old for the gardeners who find happiness in tending them. At the Hmong Community Farm, around fifty families each year find solace in these fields surrounded by trees and tended solely by the Hmong, a location for the tending of sweet corn and of community. At the Armory Park market, shoppers from various ethnicities leave contented, with bags bursting with produce that remind them of homes across oceans and contribute to the preparation of generations-old recipes. At the Broad Street market, young people sell produce tended diligently by their parents and come to appreciate the hard work of farming and the honest and health-giving occupation of their ancestors, wondering whether or not this tradition will persist in a generation of increasingly technology-oriented young professionals. Many of their parents hope so, and aspirations of reconnecting the youth with the land are materializing in the minds of Hmong leaders. With the unique confluence of knowledge, skills and hopes present not only in the Hmong community but in the greater Providence community, ground is fertile for growing an urban farming community based on the wisdom and hard work of many ethnic groups and many farming traditions, spanning generations old and young. As Southside Community Land Trust begins the next phase of its work, developing neighborhood hubs where growers can access resources, they do so from a unique advantage of being situated in a city where farming knowledge abounds—despite

challenges, there is great potential for continued evolution of farming in this city, with Hmong voices being invaluable contributors.

## APPENDIX A: MEET THE FARMERS

### MEET THE FARMERS *Phillip Yang*



Phillip Yang is President of the Hmong United Association of Rhode Island, and works as an architect. On top of an already busy schedule, he assists his wife Vue in cultivating two plots at the Hmong Community Farm, and two plots at the Glenham Street Community Garden.

*You work as a farmer, your reward is in August and September, that all your crops are full in the field. You are so happy with the way that it turned out... not only just for yourself, but you can share with the entire family and your community. You can give it out. That's what you achieve.*

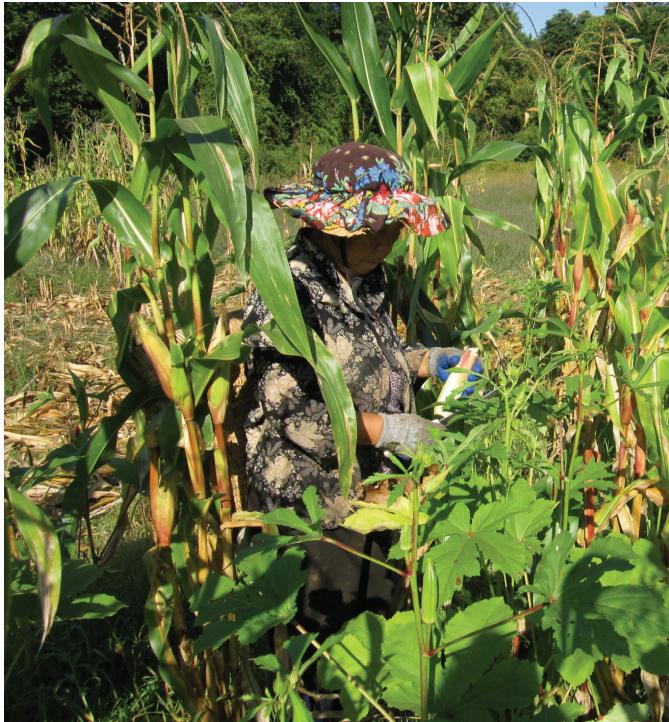
As President of HUARI, Phillip aims to improve farming opportunities for the Hmong community, locate more farmland, and create programs to educate Hmong youth about farming and other important aspects of Hmong culture.

As a member of SCLT's Community Growers Network Council he hopes to engage with the greater Providence farming community and work towards achieving these goals.



## MEET THE FARMERS

### Kia Yang



*Farming is my happiness.  
-Kia*

Kia can be found selling her produce with other community growers at the Broad Street farmers market every Saturday. She tends plots at the Hmong Community Farm and Glenham Street community garden. After first arriving in Iowa where she found no land to farm, Kia was glad to migrate to Providence where garden space was available. She is a great teacher, sharing her knowledge of farming with younger community members...and me--in November after the soybean harvest she taught me how to make tofu by hand, the same way her grandmother taught her in the mountains of Laos (pictured right).



## MEET THE FARMERS

### *Chang and George Xiong*

After years of working in jewelry manufacturing and selling handmade items, Chang Xiong has returned to her source of happiness, farming, and has built a successful farm business with the help of her husband, George, a retired officer from the Providence Police.



Chang and George cultivate two acres at Southside Community Land Trust's Urban Edge Farm property and one acre at their home in Johnston, Rhode Island. During the farmers market season they can be found at the Broad Street and Pawtuxet Village markets on Saturday mornings.

*Whatever you want to know about farming,  
I'll teach you. -Chang Xiong*



## APPENDIX B: EXTENDED METHODS

Classes I took in the Spring of 2012 were incredibly helpful in informing my research design, as I was involved in an oral history project group that involved interviewing refugee gardeners for a class called Sustenance and Sustainability taught by my advisor Kathryn de Master, and I was also in a class entitled Indigenous Knowledge Systems and the Sciences that discussed the ethics of research with indigenous communities, taught by Geri Augusto. Discussions of ethical, participatory methodology in both classes developed my foundational understanding of the different thought processes one should go through when doing research in and with minority or indigenous communities, and how to value their knowledge and unique standpoints. Through these classes and additional reading I decided my advisor's guidance to use oral history interviews and participant observation as my research methods, along with some expert informant interviews. I learned to take into careful consideration the standpoint of my interviewees in this process, considering their difficult and possibly traumatic refugee experiences, and to design my methods taking into account the fact that their forced migration to this country may still be a source of trauma and pain. I considered that talking about the differences in farming practice between here and Laos may be a difficult topic of conversation, especially the older generation, but I learned that oral history interviews place the course of the interview in the hands of the interviewee—through more open-ended questions the interviewee has the agency to go into as much detail as they feel comfortable providing, to guide the course of the conversation, and thus steer it towards topics they are comfortable with while bypassing points that they don't want to share. In addition to these ethical considerations of making sure interviewees do not feel pressured or pigeon-holed in the interview process, I wanted to employ methods that established, as much as possible, an informal and personal relationship between myself and my interviewees in order to learn about their culture, their farming practices, and their experiences in Providence in a more organic way. Participant observation was the ideal choice for achieving these aims.

With these methods carefully considered and planned out, I spent late June through late October carrying out the bulk of my field research, which enabled me to experience a great deal of the growing season and harvest. I secured interviews in a couple of ways: early on in my research I met with a professor from Rhode Island School of Design who had made two documentaries on the Hmong in Providence. He suggested I speak to Joe Vang, who works as an IT technician at Brown University's Watson Institute; Mr. Vang was my first interviewee. Most interviews were secured through meeting growers at community garden workdays and informal visits, trips to the Hmong Community Farm and Urban Edge Farm, and also during my trips to the Broad Street farmer's market on Saturday mornings. I found that securing interviews was largely about establishing rapport with people first, through asking them about their gardens or just visiting them at the farmers market—after they had seen me a few times, people were generally happy to be interviewed. I did have a couple instances of individuals saying no to being interviewed or showing with their body language (or excuses of being too busy) that they didn't want to be interviewed—in these instances I didn't ask again, I just continued to talk to them casually at the market or garden and try to keep up that positive relationship so as not to be seen as "the researcher" but as someone generally curious

about Hmong culture and likeminded in my love of gardening. The Broad Street farmer's market was the key location of my interviews with younger Hmong who were helping their parents sell. I greatly appreciated and enjoyed getting to know them and then interviewing them in this setting as it gave me a more nuanced view of the role of farming in the young Hmong generation. All of my interviews were conducted in the locations convenient for or requested by the interviewees themselves—they either took place at the market, at garden and farm sites, or in people's homes. Interviews with older members of the community generally lasted an hour or more; interviewees with younger Hmong generally took less time, typically half an hour, as they were much more brief were their stories (and with less experience to share) than their elders. Below is a list of sample interview questions used during these oral history interviews—wording varied from interview to interview, and questions shifted based on who I was interviewing, but oral history interviews were limited to about five open-ended questions per interview, with some minor clarifying questions filling out these free-flowing conversations.

- Tell me about what brought your family to Providence—what was this experience like and what were some of the challenges you faced?
- Could you tell me more about farming in your home country, before coming to the US? For instance, how is it different, how is it the same?
- What changes have you and the Hmong community had to make in the way you grow food in Rhode Island, different from back home? And what changes have you had to make in the kinds of crops you grow here?
- What places and people have been important or helpful to you and your farming since you moved to Providence?
- What kinds of improvements could be made in Providence related to growing and eating food? How do you think your community could be better supported in growing food?
- Do you find anything unfair about food or farming here in the US?
- How is farming important to you and your community, and how do you feel about young people being far away from farming as they grow up in the city here?
- Is there anything else you would like to share with me about food and farming, here or in your home country?

My participant observation involved regular hours observing and working alongside growers at the Glenham Street garden, Hmong Community Farm, Pak Express Farm, and Xiong Farms. I generally took a passive role and allowed my Hmong hosts to guide the course of these visits because they generally wanted different things; at Glenham Street Community Garden I participated in two community workdays where several volunteers were present, but on other days when I asked gardeners how I could help them they said they did not need any help, and told I could just watch. On these visits we would have long conversations and growers would show me different plants or talk about cooking methods, or just their daily lives in general, and I would take these opportunities to develop relationships and take photographs when permitted. When Phillip Yang and I visited the Hmong Community Farm, our routine was to walk the whole property and observe the progress of various crops over the course of the season, and talk about challenges the farmers were facing as well as how different plants were

harvested or used. I would make sketches of different intercropping patterns and take lots of photographs. When I visited the Community Farm with Kia Yang, we would typically harvest chili peppers and corn, and at the end of the season we used machetes to cut down all of the old eggplant and bitter ball plants. I also visited a couple growers' homes, where I had the privilege of sharing meals with their families, as well as learning about their medicinal herbs and documenting those. At Pak Express Farm I worked for several hours on Friday afternoons roughly every other week from early August through October, alongside Chang and George Xiong, always helping with the massive task of harvesting for the two Saturday morning markets they attend. The Xiong's taught me harvesting techniques and how to pick the best fruits for the market, and beyond that we had long conversations about life once we were lulled into the therapeutic monotony of digging up beets for three hours. Chang liked to take this time to enthusiastically lecture about eating right and taking care of your body—she had a lot she wanted to teach me, things I sensed she was afraid were lost on the younger generation, and I was an outlet for these lessons that she did not get to share as often as she wanted to. It was a rewarding experience for me, and hopefully a helpful time for them as well, during this especially busy time in their week. The Xiong's always sent me home with a huge bag of produce and instructions on preparation. Xiong Farms, run by Charlie Xiong was situated on the neighboring property, so I met him during a visit to Pak Express Farm and worked with him several times as well, later in the season when he was busy tearing old vines off the trellises and preparing his property for winter, which exposed me to another part of the growing season. This varied combination of experiences in participant observation allowed me to see the Hmong farming experience and routine from different perspectives, in different roles and at different points in the growing season, and just as I hoped it allowed me to develop deep personal relationships with my key informants and glean the kind of understanding that cannot be achieved simply through interviews.

These open-ended, community engaged methods I used were, I believe, key in creating space for findings that I did not anticipate, namely the findings regarding the nuances in Hmong views of farming as a livelihood in the US and what they think about work, and also the self-directed return to Hmong diets and the role of farming practice in making sure they can enjoy the kinds of diets they prefer. I also learned great deal about Hmong traditional medicine, which was not the central focus of my study but was an area of interest to me. Growers were always happy and interested to discuss this with me, and I found that my current enrollment in an herbal medicine class at Farmacy Herbs in Providence gave me a kind of credibility in discussing this topic—people would open up when I shared this with them, as they likely assumed I did not know much about this kind of healing, considering I am a young American woman. This link between myself and the Hmong, and the ways that it opened up our conversation showed me the importance of establishing a feeling of commonality in research so as to gain a deeper understanding of culture, and to glean rich, nuanced findings. I would describe the entire experience as richly fulfilling, and believe that the approach I took to this research kept the experience positive for my interviewees as well, in spite of their busy schedules.

## APPENDIX C: HMONG FARMING AND AGROECOLOGICAL PRINCIPLES

<b>Alignment of Hmong Farming Practices with Agroecological Principles</b>		
<b>Principles of Agroecology<sup>1</sup></b>	<b>Examples observed at Hmong garden and farm sites</b>	<b>Challenges/Potential for Growth</b>
1. Enhance recycling of biomass and optimizing nutrient availability and balancing nutrient flow.	Garden scraps, organic waste left on top of soil as mulch after each harvest and at the end of the season	Composting for backyard gardens and Hmong Community Farm; Compost bin construction to avoid having compost delivered
2. Securing favorable soil conditions for plant growth, particularly by managing organic matter and enhancing soil biotic activity.	Compost used in community gardens, Pak Express, Xiong Farms; Intercropping used by all	More education and awareness around organic soil amendments
3. Minimizing losses due to flows of solar radiation, air and water by way of microclimate management, water harvesting and soil management through increased soil cover.	Living mulch; Intercropping; varied species and plant heights; Very little bare soil; Rainwater harvesting at Hmong Community Farm	Improved rainwater harvesting systems
4. Species and genetic diversification of the agroecosystem in time and space.	Intercropping; Successive plantings; Varied crops for spring, summer, fall seasons	Continued and expanded access to land on which to grow these diverse agroecosystems
5. Enhance beneficial biological interactions and synergisms among agrobiodiversity components thus resulting in the promotion of key ecological processes and services.	Integration of organic matter into the soil; Hand tilling and digging the soil which avoids compaction and erosion, creating a beneficial environment for soil life; Intercropping	Knowledge sharing between farmers of various ethnic groups on chemical-free soil management; Increased on-site composting

<sup>1</sup>(Altieri 1987)

## APPENDIX D: CULINARY SPECIES OBSERVED

CULINARY SPECIES OBSERVED AT HMONG GARDENS AND FARMS		
SCIENTIFIC/ HMONG/ COMMON NAME <sup>1</sup>	VARIETY/DESCRIPTION	PREPARATION/NOTES <sup>2</sup>
Allium chinense and schoenoprasum/ Onion	Wild/Japanese onion, Chives	For seasoning in a variety of dishes
Allium sativum/ Garlic		For seasoning in a variety of dishes
Amaranthus spp./ Amaranth	common edible weed	Leaves boiled or eaten fresh while young; Found in community gardens and at HCF
Anethum graveolens/ Dill		Boil for tea- stomach or headache; use as seasoning in variety of dishes
Basella alba / hmaab ntshaa or hmab ntsha ("purple vine")/ Ceylon spinach		Seasoning for chicken, tonic, back pain and arthritis (Corlett, 1999); Found in medicinal herb gardens
Benincasa hispida/ Wax gourd or winter melon	Varied in shape from round and dark green to elongated and light green; Phillip and Vue Yang grew a winter melon that was 3 ft long and 1 ft diameter	Peel, chop, boil for at least 25 minutes; Add to soups with meat
Beta vulgaris/ Beets	red varieties	Peeled and boiled; Popular market item and lengthener of the growing season
Brassica juncea and Brassica aff. Napus/ Mustard greens	Broad leaf (juncea) and flowering (aff. napus)	Boil, steam or stir fry with meat; use in bitter greens soup
Brassica oleracea Acephala/ Kale	at least 3 varieties @ Pak Express (red russian, curly, dinosaur?)	Mainly grown for market by Pak Express Farm; grown by some at Glenham St. garden
Brassica oleracea/ Cabbage, Collard Greens, Brussels sprouts, etc	both purple and green cabbage	Cabbage grown for market by Pak Express Farm; collards grown for market and in community gardens; Brussels sprouts grown by Xiong Farms for market
Capsicum annuum/ Chili pepper	Chili	For seasoning in a variety of dishes; Prepared as a spicy sauce with cilantro and cherry tomatoes (Kia Yang); Frozen in large amounts for winter

<i>Capsicum frutescens</i> / Bell pepper	Bell	Mainly grown for market by Pak Express Farm
<i>Citrullus lanatus</i> / Watermelon		Eaten fresh; Grown for market by Pak Express Farm and Xiong Farms
<i>Colocasia esculenta</i> / qos do/ Taro		Kia Yang's favorite traditional food- harder to grow here; Root used for food and poultice for swelling, stems boiled for poultice for swelling (Corlett 1999); steam or boil and eat
<i>Coriandrum sativum</i> / Cilantro		For seasoning in a variety of dishes; Used for a spicy sauce with chili peppers and cherry tomatoes and used as a topping for soup; To freeze over winter: chop, put in freezer bag
<i>Cucumis melo</i> var. <i>conomon</i> / Pickling melon or muskmelon or canteloupe	Smooth green skin or textured beige skin	Boiled or stir fried when young; Eaten fresh when ripe; Grown for market by Pak Express Farm and Xiong Farms
<i>Cucumis sativus</i> / cucumber	large Asian variety up to a foot long, 5 inches in diameter, colors from yellow to orange to green	Eaten fresh; Peel and scoop out seeds to freeze
<i>Cucurbita moschata</i> / Japanese pumpkin or butternut squash or kabocha squash	Many varieties, many shapes, sizes and colors	Grown for market by Pak Express Farm and Xiong Farms; Major crop for family consumption at HCF and Glenham St. garden; Peel and boil 25 minutes, add to soup (Kia Yang)
<i>Cucurbita pepo</i> / Summer squash or zucchini	summer varieties	Grown for market and family consumption in smaller numbers- winter squashes & pumpkins more common; Boil, chopped and unpeeled, for 10 minutes (Kia Yang)
<i>Cymbopogon citratus</i> / Lemongrass		Boiled for tea for digestion, or chopped for a poultice for sprains; For seasoning in a variety of dishes such as chicken and fish
<i>Daucus carota</i> / carrot		Steamed, boiled or added to stir-fries and soups

Eupatorium cannabinum (?) / zej ntshua ntaug/ Hemp agrimony (?)		Found in medicinal herb gardens; Boil with chicken for a general tonic (Corlett 1999); for new mothers: heat up the leaves and place on her back-helps woman's body release excess blood from the womb; prepare in chicken soup after birth; for protection from evil: 3 leaves, put in a bag and carry or put under pillow
Glycine max/ Soybean	Short season variety	Left to dry on vine until November, used to make homemade tofu
Ipomoea aquatica/ Ipomoea or water spinach	Elongated leaves 3-5 in long	Use as a salad green (Phillip Yang recommends this with Ranch dressing!); Stir-fry with fish sauce or put in sour soup
Ipomoea batatas/ sweet potatoes	japanese yam variety- purple skin, white flesh (Pak Express Farm); white skin and white flesh variety (Xiong Farms)	Peel and boil 20-25 minutes, eat with broth it was cooked in to get more nutritional benefit (Chang Xiong); Add to soup
Lagenaria sceraria/ edible bottle gourd	Vining growth habit; mid-sized light green round gourd with bottle-neck	Boil for soup with meat
Latuca sativa/ lettuce	Wide selection of varieites	Grown mainly for the market by Pak Express Farm and Xiong Farms; Chee grows at Glenham St. because salad is her favorite American food
Luffa acutangula/ luffa		Boiled with meat or stir fried; Vine climbs trellises and fences to form living walls
Mentha piperita and spicata/ peppermint and spearmint		To season fish; tea for digestion
Momordica charantia / dlib ab / dib iab ("bitter cucumber")/ bitter melon		Boil in soup with chicken, beef or pork; Vine climbs trellises and fences to form living walls
ntsaug quab rau ntse		Cooked with fish for flavor
Ocimum basilicum 'Horapha' / zaub txis theem ("vegetable that grows on all levels")/ basil	Thai	All parts of plant are edible; Added to stir-fries or to top soups

<i>Oryza sativa</i> / rice	Mainly sticky, black and purple varieties grown-short season varieties	Staple of the Hmong diet, served with all meals
<i>Phaseolus vulgaris</i> / pole beans	green	Added to stir fries and soups, boiled
<i>Phaseolus vulgaris</i> / bush beans	Bush varieties are bean of choice at Pak Express Farm- less labor than the pole variety since there is no need for trellis	Added to stir fries and soups, boiled
<i>Pisum sativum</i> / peas	field	Tendrils are eaten raw or added to stir-fry; Peas added to stir fry or boiled
<i>Portulaca oleracea</i> / Purslane	edible weed found in gardens	Boil the leaves or eat fresh
<i>Saccharum</i> spp./ sugarcane	cooler weather variety grown in mountains does pretty well here too	Peel and chew fresh; Grown for family consumption at HCF and Xiong Farms
<i>Sechium edule</i> / taub taaj ("furry squash")/ chayote	Light green, "furry," oddly shaped	Boil in soup or stir fry with meat; Enjoyed by many ethnic groups and popular seller for Southside Community Growers
<i>Solanum integrifolium</i>	Scarlet Chinese Eggplant	Boil with meat- bitter; Popular seller at Armory and Broad St. markets, loved by the African community as well as Asian
<i>Solanum lycopersicum</i> esp. <i>Lycopersicum esculentum</i> / lws suav ("Chinese eggplant")/ tomatoes, especially cherry tomatoes	mostly cherry tomatoes; some larger varieties, mostly grown for market	Eaten fresh, used to make spicy sauce with chili peppers and cilantro (Kia Yang); Heirlooms grown by Pak Express Farm and Xiong Farms
<i>Solanum melongena</i> / eggplant	Thai, Japanese, Roman	Stir fried or added to soups
<i>Solanum tuberosum</i> / potatoes	red-skinned new potatoes	Boiled, added to soups
Unknown name	edible vine common in the city-small, shiny, elliptical leaves, round stem, vibrant green leaves	Boil the leaves 10 minutes

Unknown name	Leaves look like potato plant, fruit looks like white radish, fruit tastes like water chestnut; was popular in Laos	Harvest in October/November; Peel root and eat fresh
Vigna unguiculata/ pole beans: Asian long	Asian long (purple)	Boil or stir fry; Vines form living walls up trellises and fences
Yam; qos ntoo		Flower is edible: boil and eat; Tuber- boil or chop in small pieces and cook with rice
Zea mays/ corn	Hmong sticky variety; yellow, white, purple, multicolor varieties	Major staple crop grown at HCF; boil (time varies depending on ear size); To freeze: shuck, boil for 10 minutes, let cool, put in a freezer bag
<sup>1</sup> Scientific and common names not confirmed, some may be incorrect		<sup>2</sup> Uses emerged from interviews; some drawn for Corlett (1999) study on Hmong botanical diversity

## APPENDIX E: MEDICINAL SPECIES OBSERVED

MEDICINAL SPECIES OBSERVED AT HMONG GARDENS AND FARMS		
SCIENTIFIC/ HMONG/ COMMON NAME <sup>1</sup>	VARIETY/DESCRIPTION	PREPARATION/NOTES <sup>2</sup>
<i>Acorus gramineus</i> / pawj qaib/ chinese sweet grass		Use for a cough: make a tea with 4-5 tsp hot water, take 2-3 times
<i>Anethum graveolens</i> / Dill		Boil for tea- stomach or headache; use as seasoning in variety of dishes
<i>Apiacaea</i> (unknown species)		For women with new baby: aids strength and recovery- chicken soup 3x day
<i>Basella alba</i> / hmaab ntshaa or hmab ntsha ("purple vine")/ Ceylon spinach		Seasoning for chicken, tonic, back pain and arthritis (Corlett, 1999); Found in medicinal herb gardens
<i>Canna indica</i> / qhau liab/ Canna or Indian shot	Large, deep purple leaves, over 6 ft tall- beautiful ornamental at Glenham St. garden	Stomachache, cough, tonic for lethargy and weakness (Corlett 1999); Wrap sticky rice in the leaves to steam; Eat the roots, steamed; Bake fish wrapped in leaves. Plant in April/May, harvest roots in October
<i>Celosia argentea</i> / paaj qab ib ("cocks comb flower")/ Cockscomb		Found in medicinal herb gardens; Edible young leaves, medicinal, ornamental and weed (Corlett 1999)
<i>Colocasia esculenta</i> / qos do/ Taro	ornamental "elephant ear" used in American gardens	Kia Yang's favorite traditional food- harder to grow here; Root used for food and poultice for swelling, stems boiled for poultice for swelling (Corlett 1999); steam or boil and eat
<i>Cryptotaenia japonica</i> / Mitsuba or Japanese Honeywort	Green leaves, purple stems	
<i>Cymbopogon citratus</i> / Lemongrass		Boiled for tea for digestion, or chopped for a poultice for sprains; For seasoning in a variety of dishes such as chicken and fish

Dendranthema indicum; suv ntsim/ Chrysanthemum		Found in medicinal herb gardens; make soup, any kind you like; for cough or have stomach problems- can't digest- ; take 3x--take in the morning on an empty stomach- just eat that;
Hosta ; nplooj qhwv yeeb		Used for indigestion after eating: use 3 leaves, chopped, cook with eggs; eat this 3 mornings. Use for swelling and benign tumors: prepare in same way with eggs, or take 3 leaves and warm at stove, then use as a poultice on swollen area 3-4 times
ko taw os liab		For women with new baby: aids strength and recovery- chicken soup 3x day; For seasoning for chicken or chopped and steamed with eggs as a strengthening tonic, or combined with lemongrass as a poultice for sprains (Corlett 1999)
kua txob ntsuab		For men: reproductive tonic "like Viagra" or for weakness/lethargy. For women with a new baby: aids strength and recovery. Prepare in chicken soup.
Lagenaria sceraria/ edible bottle gourd		Boil for soup with meat
Mentha piperita and spicata/ peppermint and spearmint		To season fish; tea for digestion
nkaj liab		Use in chicken soup for women with new baby--aids strength and recovery
nkaj ntoo		Use for men as reproductive tonic; also for women--helps with fertility; prepare with eggs before and after menstrual cycle

nrab koob		Use to lower fever: wrap thick cloth on around arms and ankles, then place 3 leaves on top of cloth, then cover with another cloth (this method prevents stains on skin); apply right before certain time of day when fever flares up; you can also drink as a tea (prepare with 7 leaves for women, 9 leaves for men)
paj kub tub sab	some pink, some yellow, some red flowers	Root used for men's strength or for young babies with fever: take aerial parts of plant, put 3 leaves in a cup with hot water and drink as a tea to get rid of headache and fever, repeat 3 times (total of 9 leaves given)
Polygonum odoratum/ knotweed		Found in medicinal herb gardens; Cited as diuretic, febrifuge, nauseant; used to season fish (Corlett 1999); For small babies, 4-5 months: to lower fever, take 3 leaves (from top of the plant) and make a tea for the baby
Polygonum runcinatum		Found in medicinal herb gardens; Aid for heartburn or indigestion- make a tea (Corlett 1999)
qos nplooj nte		Use for 2 things: 1) boil roots, drink tea before going out drinking to prevent drunkenness; 2) For men- "just like Viagra"- cook with chicken soup
rag dag		Ear infection: cut a section of the stem and blow the ear through the hollow stem three times, 3x a day. Helps menstrual pain and UTI pain:boil 20 to 30 minutes, drink 3x a day.
Ricinus communis/ castor bean	Deep reddish purple leaves, reaching height of up to 7 feet	Different people use it in different ways: to ease nerves, calm fear (Kia Yang); help

		back pain (Mee Yang)
Solanum nigrum/ nightshade		
tshuaj rog ntsuab		Use in soup for women with new babies; Heals swollen, puss-filled skin blemishes: mash leaves, warm in microwave, and put on the red spot to ease inflammation, release puss
Unknown name	elliptical leaves with pronounced pinnate veination; pale green stems; leaves darker green towards edges, paler towards mid-vein	Make a poultice for itchy skin/bites
Unknown name	thick succulent mid-sized leaves with smooth edges; woody, twining stems	Can buy at Home Depot or Stop & Shop. Heals broken bones: take a bunch of leaves (10-15) and mash together, then put in the microwave and warm for 10-15 seconds, add a little rice wine (1-2 tsp) and mix together, apply as a poultice to affected area, wrap with a cloth; 1x per day (keep on all day, change daily) for 1 week
Unknown name	mid-sized elliptical leaves, slightly scalloped edges; small white flower with orange stamen	Helps you tolerate spicy food; boil roots and drink it as a tea--builds up your strength; also helps bring down fever
<sup>1</sup> Scientific and common names not confirmed, some may be incorrect		<sup>2</sup> Uses emerged from interviews; some drawn for Corlett (1999) study on Hmong botanical diversity

## APPENDIX F: HMONG MEDICINAL PLANTS PHOTO COLLECTION

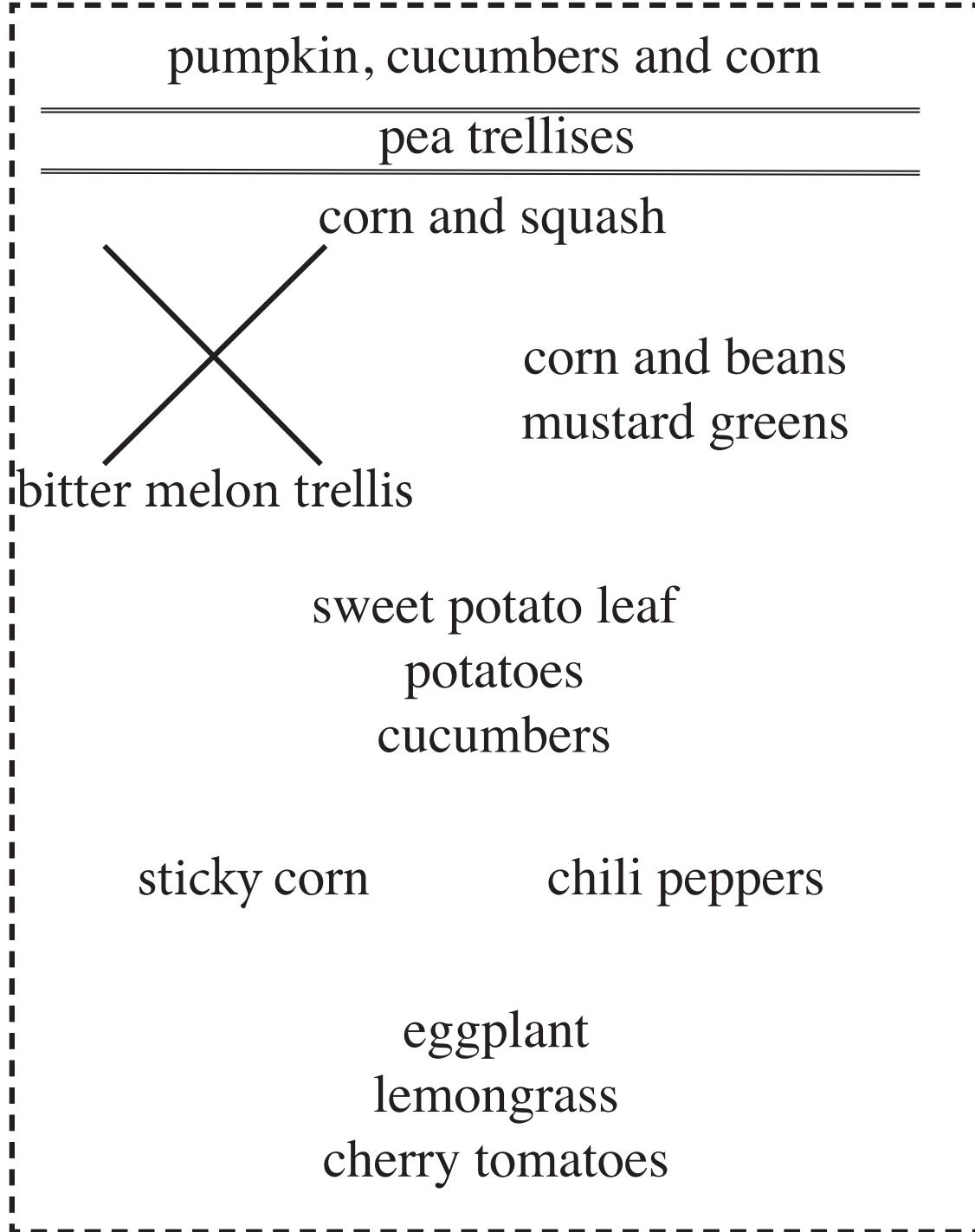
### A Glimpse of the Hmong Medicine Garden



Photographs from the gardens of Chang Xiong and Vue Yang

## APPENDIX G: SAMPLE PLOT LAYOUTS

### SAMPLE PLOT: HMONG COMMUNITY FARM



SAMPLE PLOT: GLENHAM STREET COMMUNITY GARDEN



## APPENDIX H: WORKS CITED

- Alkon, Alison Hope and Teresa Marie Mares. 2012. "Food Sovereignty in US Food Movements: radical visions and neoliberal constraints". *Agriculture and Human Values* 29: 347-359.
- Altieri, Miguel. 1987. *Agroecology: The Science of Sustainable Agriculture*. London, UK: Intermediate Technology Publications.
- Altieri, Miguel. 1987. "Peasant Agriculture and the Conservation of Crop and Wild Plant Resources." *Conservation Biology* 1(1):49-58.
- Altieri, Miguel A. and Clara I. Nicholls. 2005. *Agroecology and the Search for a Truly Sustainable Agriculture* 1<sup>st</sup> edition. University of California, Berkeley: Basic Textbooks for Environmental Training.
- Altieri, Miguel A., Fernando R. Funes-Monzote and Paulo Petersen. 2012. "Agroecologically efficient agricultural systems for smallholder farmers: contributions to food sovereignty". *Agronomy for Sustainable Development* 32(1): 1-13.
- Agrawal, Arun. 1995. *Maintaining aboriginal identity, languages, and culture in modern society: Reclaiming indigenous voices and vision*. Vancouver: University of British Columbia Press.
- Augusto, Geri. 2009. "'A World Only Partly Named': Knowledge of Plants for Therapeutic Interventions in the Early Cape Colony Among the Free and Unfree." In *Freedom: Retrospective & Prospective*, edited by Swithin Wilmot. University of West Indies Press.
- Beckford, Clinton L., Clint Jacobs and Naomi Williams, and Russell Nahdee. 2010.

- “Aboriginal Environmental Wisdom, Stewardship and Sustainability: Lessons From the Walpole Island First Nations, Ontario, Canada”. *The Journal of Environmental Education* 41(4): 239-248.
- Berkes, Fikret, Johan Colding and Carl Folke. 2000. “Rediscovery of Traditional Ecological Knowledge as Adaptive Management”. *Ecological Applications* 10(5): 1251-1262.
- Berkes, Fikret. 2012. *Sacred Ecology* 3<sup>rd</sup> edition. New York: Taylor & Francis.
- Berry, Wendell. 1977. *The Unsettling of America*. San Francisco: Sierra Club Books.
- Burawoy, Michael. 1998. “The Extended Case Method.” *Sociological Theory* 16(1):4 33. Washington DC: American Sociological Association.
- Burawoy, Michael. 2005, February. 2004 presidential address: For public sociology. *American Sociological Review* 70: 4-28.
- Cajete, Gregory. 1994. *Look to the mountains: An ecology of indigenous education*. Skyland, NC: Kivaki Press.
- Chan, Sucheng. 1994. *Hmong Means Free: Life in Laos and America*. Philadelphia: Temple University Press.
- Clifford, James. 2007. “Varieties of Indigenous Experience: Diasporas, Homelands, Sovereignties. Pp. 197-218 in *Indigenous Experience Today* edited by Marisol de la Cadena and Orin Starn. Oxford: Berg.
- Corlett, Jan Louise. 1999. *Landscapes and Lifescapes: Three Generations of Hmong Women and their Gardens*. PhD dissertation: University of California, Davis.
- Community Food Security Coalition. n.d. What is community food security?

- Community Food Security Coalition Website.  
[http://www.foodsecurity.org/views\\_cfs\\_faq.html](http://www.foodsecurity.org/views_cfs_faq.html). Accessed 24 October 2012.
- Culhane-Pera, Kathleen A., Dorothy E. Vawter, Phua Xiong, Barbara Babbitt, and Mary M. Solberg. 2003. *Healing by Heart: Clinical and Ethical Case Stories of Hmong Families and Western Providers*. Vanderbilt University Press.
- Culhane-Pera, Kathleen A. and Cheng Her. 2007. "'We are out of balance here': a Hmong Cultural Model of Diabetes".
- De Master, Kathryn Teigen. "Sowing the Mustard Green Seed: Hmong Gardeners Cultivating Knowledge, Land, and Culture." In *Discourses and Silences: Indigenous Peoples, Risks and Resistance*. Eds. Garth Cant, Anake Goodall and Justin Inns. University of Canterbury, New Zealand: 2005. 259-276.
- Donnelly, Nancy Dorelle. 1989. The Changing Lives of Refugee Hmong Women. PhD Dissertation: University of Washington. 148.
- Fadiman, Anne. 1997. *The Spirit Catches You and You Fall Down*. New York: Farrar, Straus and Giroux.
- Fairbairn, Madeleine. 2012. "Framing transformation: the counter-hegemonic potential of food sovereignty in the US context". *Agriculture and Human Values* 29: 217-230.
- Flats Mentor Farm. Flatsmentorfarm.org.
- Flora, Cornelia Butler. 1992. "Reconstructing Agriculture: The Case for Local Knowledge". *Rural Sociology* 57 (1):92-97.
- Franzen, Lisa and Chery Smith. 2008. "Acculturation and environmental change impacts dietary habits among adult Hmong". *Appetite* 52: 173-183.

- Gliesmann, Steve. 2012. “Agroecology and Interculturality” [Editorial]. *Journal of Sustainable Agriculture* 36: 151-152.
- Goodenough, Ward. 2011. “Navigation in the Western Carolines: A Traditional Science.” In Sandra Harding (ed.), *The Postcolonial Science and Technology Studies Reader*, Durham: Duke University Press 159-174.
- Goodkind, Jessica R. 2006. “Promoting Hmong Refugees’ Well-Being Through Mutual Learning: Valuing Knowledge, Culture, and Experience”. *American Journal of Community Psychology* 37 (1-2): 77-92.
- Goto, Keiko, Wa Mee Vue, Tong Xiong, and Cindy Wolff. 2010. “Divergent Perspectives on Food, Culture and Health among Hmong Mothers with Middle-School Children.” *Food, Culture & Society* 13(2): 182-198.
- Gottlieb, Robert, and Andrew Fisher. 1995. *Community food security: Policies for a more sustainable food system in the context of the 1995 Farm Bill and beyond*. Los Angeles, CA: Lewis Center for Regional Policy Studies, UCLA.
- Gottlieb, Robert and Anupama Joshi. 2010. *Food Justice*. Massachusetts Institute of Technology.
- Gurian-Sherman, Doug. April 2008. “CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations.” Union of Concerned Scientists. Cambridge, MA: UCS Press.
- Her, Vincnet K. and Mary Louise Buley-Meissner. 2012. *Hmong and American: From Refugees to Citizens*. St. Paul, MN: Minnesota Historical Society Press.
- Hassanein, Neva. 1999. Changing the Way America Farms: Knowledge and

- Community in the Sustainable Agriculture Movement. Lincoln: University of Nebraska Press.
- Horrigan, Lee, Robert S. Lawrence, and Polly Walker. 2002. "How Sustainable Agriculture Can Address the Environmental and Human Health Harms of Industrial Agriculture." *Center for a Livable Future* (Research Review).
- Baltimore, MD: Johns Hopkins Bloomberg School of Public Health.
- Innis, Donald Q. 1997. *Intercropping and the Scientific Basis of Traditional Agriculture*. UK: Practical Action Publishing (Indigenous Knowledge and Development Series).
- Jeavons, John. 2012. *How to Grow More Vegetables*. 8<sup>th</sup> ed. Berkeley: Ten Speed Press.
- Kloppenburg, Jack Jr., Sharon Lezberg, Kathryn De Master, George W. Stevenson, and John Hendrickson. 2000. "Tasting Food, Tasting Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People." *Human Organization* 59(2): 177-186.
- Kou, Yang. 2001. "Becoming American: The Hmong American Experience". *Ethnic Studies Review* 24 (1, 2 & 3).
- [Historical context of Hmong arrival in the US, written by Hmong scholar]
- Lee, Gary Yia. 2005. "The Shaping of Traditions: Agriculture and Hmong Society." *Hmong Studies Journal* 6:1-33.
- Lee, Gary Yia. 2012. "The Spirit of Enterprise and the Emergence of Hmong and Hmong American Identities: Reflections of a Hmong Anthropologist." In *Hmong and American: From Refugees to Citizens*. St. Paul, MN: Minnesota Historical Society Press.

- Lee, John Kha, and Katherine Green. 2010. "Acculturation Processes of Hmong in Eastern Wisconsin". *Hmong Studies Journal* 11: 1-21.
- Lemoine, Jacques. 2011. "Commentary: The (H)Mong Shamans' Power of Healing: Sharing the Esoteric Knowledge of a Great Mong Shaman". *Hmong Studies Journal* 12: 1-36.
- Lor, Pao. 2012. "Hmong American Professional Identities: An Overview of Generational Changes since the 1970s." In *Hmong and American: From Refugees to Citizens*. St. Paul, MN: Minnesota Historical Society Press.
- Lyson, Thomas. 2004. *Civic Agriculture*. Lebanon, NH: Tufts University Press.
- Markowitz, Lisa. 2010. "Expanding access and alternatives: farmers' markets in low-income communities." *Food and Foodways* 18:66-80.
- McMichael, Philip and Harriet Friedmann. 1989. "Agriculture and the State System." *Sociologica Ruralis* XXIX:2.
- Minkoff-Zern, Laura-Anne, Nancy Peluso, Jennifer Sowerwine, and Christy Getz. "Race and Regulation: Asian Immigrants in California Agriculture." In *Cultivating Food Justice*. Eds. Alison Hope Alkon and Julian Agyeman 2011. Massachusetts Institute of Technology. 65-82.
- Mortland, Carol A. and Judy Ledgerwood. 1987. "Secondary Migration Among Southeast Asian Refugees in the United States." *Urban Anthropology* 16 (3-4): 291-326.
- Moua, MyLou Y. and Susie D. Lamborn. 2010. "Hmong American Adolescents' Perceptions of Ethnic Socialization Practices". *Journal of Adolescent Research* 25(3)416-440.

- Mulasi-Pokhriyal, Urvashi, Chery Smith, and Lisa Franzen-Castle. 2011. "Investigating dietary acculturation and intake among US-born and Thailand/Laos-born Hmong-American children aged 9-18 years". *Public Health Nutrition* 15(1): 176-185.
- Ng, Franklin. 2008. "From Laos to America" in *Emerging Voices: experiences of underrepresented Asian Americans* ed. Huching Ling. Rutgers Press.
- Nibbs, Faith. 2010. "A Hmong Birth and Authoritative Knowledge: A case study of choice, control, and the reproductive consequences of refugee status in American childbirth". *Hmong Studies Journal* 11: 1-14.
- Ong, Aihwa. 2003. *Buddha is Hiding: Refugees, Citizenship, the New America*. University of California Press.
- Patel, Raj. 2010. "What Does Food Sovereignty Look Like?" In *Food Sovereignty: Reconnecting Food, Nature and Community*. Eds. Wittman, Hannah, Annette Aurelie Desmarais and Nettie Wiebe 2010. Nova Scotia, Canada: Fernwood Publishing. 186-196.
- Patel, Raj. 2009. "Grassroots Voices: Food sovereignty." *The Journal of Peasant Studies* 36(3): 663-706.
- Perfecto, Ivette, John Vandermeer, and Agnus Wright. 2009. *Nature's Matrix*. London, UK: Earthscan.
- Pfeifer, Mark E., Eric Lai, and Dennis Arguelles. 2003. "Hmong Americans" from The New Face of Asian Pacific Americans: Numbers, Diversity and Change in the 21<sup>st</sup> Century" eds Eric Lai and Dennis Arguelles. AsianWeek Magazine and UCLA

- Asian American Studies Center. Retrieved from <http://www.asian-nation.org/hmong.shtml>.
- Potts, Monica. 2011, March 5. “The Serfs of Arkansas.” *The American Prospect*. Retrieved from <http://prospect.org/article/serfs-arkansas-0>.
- Scott, George M., Jr. 1986. *Migrants without Mountains: the Politics of Sociocultural Adjustment among the Lao Hmong Refugees in San Diego*. PhD Dissertation: University of California San Diego. 163.
- Sherman, S. 1988. The Hmong in America. *National Geographic* 174 (4): 586-610.
- Siriphon, Aranya. 2006. “Local Knowledge, Dyanmism, and the Politics of Struggle: A Case Study of the Hmong in Northern Thailand”. *Journal of Southeast Asian Studies* 37(1): 65-81.
- Schiavoni, C. 2009. “The global struggle for food sovereignty: From Nyeleni to New York”. *Journal of Peasant Studies* 36(3): 682–689.
- Tapp, Nicholas. 1986. *The Hmong People of Thailand: Opium People of the Golden Triangle*. Anti-Slavery Society.
- Tapp, Nicholas. 1989. *Sovereignty and rebellion: the White Hmong of Northern Thailand*. New York: Oxford University Press.
- Vandermeer, John and Ivette Perfecto. 2013. “Complex Traditions: Intersecting Theoretical Frameworks in Agroecological Research.” *Agroecology and Sustainable Food Systems* 37: 76-89.
- Vang, Chia. 2010. *Hmong America: Reconstructing Community in Diaspora*. University of Illinois.

- Vang, Christopher T. 2005. "Hmong-American Students Still Face Multiple Challenges in Public Schools." *Multicultural Education* 13(1): 27-35.
- Vang, Ka. 2012. "The Good Hmong Girl Eats Raw *Laab*". Pp. 101-111 in Vincent K. Her and Mary Louise Buley-Meissner eds. Hmong and American: From Refugees to Citizens. St. Paul, MN: Minnesota Historical Society Press.
- Via Campesina. 1996. "Food Sovereignty: A Future without Hunger." From *The Right to Produce and Access to Land*. Via Campesina Declaration of Food Sovereignty in Rome, Italy, November 11-17 1996. Retrieved from  
<http://www.voiceoftheturtle.org/library/1996%20Declaration%20of%20Food%20Sovereignty.pdf>
- Via Campesina 2011. "Organisation: The international peasant's voice"  
<http://viacampesina.org>. Published February 9, 2011. Retrieved February 11, 2013.
- Vue, Wa, Cindy Wolff, and Keiko Goto. 2011. "Hmong Food Helps Us Remember Who We Are: Perspectives of Food Culture and Health among Hmong Women with Young Children." *Journal of Nutrition Education and Behavior* 43 (3): 199-204.
- Westermeyer, Joseph. 2011. "Refugee Resettlement to the United States: Recommendation for a New Approach". *The Journal of Nervous and Mental Disease* 199(8): 532-536.
- Wittman, Hannah, Annette Aurelie Desmarais and Nettie Wiebe 2010. *Food Sovereignty: Reconnecting Food, Nature and Community*. Nova Scotia, Canada: Fernwood Publishing.

Yang, Kou. 2012. "Forging Paths, Confronting New Challenges: Hmong Americans in the 21<sup>st</sup> Century." In *Hmong and American: From Refugees to Citizens*. St. Paul, MN: Minnesota Historical Society Press.