Seed Storytelling: Growing Food as Cultural and Ecological Resilience in Asian American Communities

Kaitlyn Chin

Follow this and additional works at: https://scholarship.claremont.edu/scripps_theses

Part of the Community-Based Learning Commons, Public Health Commons, and the Social Justice Commons

Recommended Citation
Chin, Kaitlyn, "Seed Storytelling: Growing Food as Cultural and Ecological Resilience in Asian American Communities" (2023). Scripps Senior Theses. 2064.
https://scholarship.claremont.edu/scripps_theses/2064

This Open Access Senior Thesis is brought to you for free and open access by the Scripps Student Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in Scripps Senior Theses by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.
Seed Storytelling: Growing Food as Cultural and Ecological Resilience in Asian American Communities

A Thesis Presented

By

Kaitlyn Chin

Submitted to Scripps College
and to Keck Science Department of Claremont McKenna, Scripps, and Pitzer Colleges
In Partial Fulfillment of
The Degree of Bachelor of Arts

Senior Thesis in Asian American Studies and Human Biology

April 28, 2023
# Table of Contents

Acknowledgements..................................................................................................................2

Introduction: 蚕豆..................................................................................................................3

Chapter 1: Asian American Relationships to Land and Labor............................................13
  On Stolen Land....................................................................................................................14
  Asian Agricultural Labor in California..............................................................................17

Chapter 2: Stewarding the Seeds that Connect Us to our Roots......................................26
  Shao Shan Farm..................................................................................................................27
  Kamayan Farm...................................................................................................................29
  Farmer Mai..........................................................................................................................31
  Discussion............................................................................................................................32

Chapter 3: What can we learn from our Elders?...............................................................50
  Immigrant Gardens..........................................................................................................51
  Preserving Seeds, Preserving Life....................................................................................59

Conclusion...............................................................................................................................63

Appendix................................................................................................................................64

Bibliography..............................................................................................................................65
Acknowledgements

Thank you to my wonderful thesis readers Professor Wendy Cheng and Professor Pete Chandrangsu for your thoughtful guidance and encouragement. Professor Cheng, thank you so much for your affirming support for this personal project. It feels very special to be able to share my thoughts and work through them with you. Professor Chandrangsu, thank you so much for your support in expanding the possibilities of what my thesis could look like and for your helpful recommendations.

I would like to thank Professor Kathy Yep, whose teaching and guidance rooted in relationality and care has transformed and expanded many ways of thinking for me and how I view the world. Thank you to Professor Warren Liu for being the best major advisor, helping me deepen and solidify my interest and commitment to Asian American Studies.

Thank you to my dear friends who bring me so much joy and love. Thank you to my lovely partner for always believing in me and grounding me.

Lastly, thank you to my mom, my 外公, my grandparents, my dad, and my brother. 外公, thank you for your wisdom, kindness, and care. Mom, thank you for raising me with love.
Introduction: 蚕豆

On a warm day, my wai gong hands me a pair of scissors as we begin to harvest 蚕豆 (cándòu) which used to be small stalks just a few months ago, now fully grown into sweet and tender spring beans encased in a thick green pod that measure longer than the size of my head. Using the pressure of my fingernails to detach the pod from the beanstalk, I ask him about this plant that has been growing alongside his 枸杞 (gǒuqǐ) goji berries and 雪菜 (xuěcài) winter vegetables. Even though it has frequented the dinner table with my family, I’ve truthfully never really liked eating 蚕豆 because the texture was too mushy and grainy for my liking (granted which is how beans usually are). The preparation required would be tedious in peeling the pod and the work to spit out the shell to taste one was not my favorite. Wai gong tells me that the main reason he grew this plant here was because it is one of my mom’s favorite things to eat.

They grew up eating this dish in Shanghai during the 1970s and 80s; because my grandparents worked all week in factories away from home and would only come home once or twice a week, my mom’s ‘grandma’ (who wasn’t directly related to her, but still took her in) raised her and took care of her. My mom’s grandma would cook Shanghainese food for her, and my mom came to love this taste that she grew up with because it was familial and it was made with devoted and unconditional love. When my mom talks about her, she speaks with such tenderness and admiration, as well as sadness and grief from her passing, that I can feel the strength of their relationship through her voice. Picking off a final spring bean as I listen to my grandpa, wai gong and I quickly gather a generous amount of 蚕豆 into plastic bags that would be divided up into portions for himself, my mom, and his friends. Driving home with our bag in the passenger seat, I go home and help my mom prepare them. We stand in our kitchen with a trash can underneath our hands so that when we snap the stem end off of the pod, we pull the
attached string to unseam it, pop out the beans, and discard the pod. Each bean is held in a tough
shell that gets cooked with it and only gets removed by the act of spitting it out while eating.
With its sturdy, well-insulated layers, this crop has been designed to endure hardship— it has
thrived worldwide for more than 10,000 years, showing me its resiliency and value in nourishing
many. At dinner with our plate of 蚕豆 freshly cooked in front of us, my mom tells me the same
thing wai gong had earlier that day. Learning from these stories passed on through my family, I
develop a sense of place and closeness with our histories.

My relationship with my wai gong is one of the most precious and grounding connections
that I have in my life. Like many other immigrant families, my grandparents supported my
parents by taking care of me, feeding me, and raising me. From them, I have learned the
importance of bringing patience and tenderness in my relationships and to myself, and most
importantly, that my well-being is the center of all things. My wai gong would give me that look
when I would sheepishly tell him that I didn’t eat breakfast and didn’t sleep well. Or, when I
cried at the dinner table as a child because my parents scolded me, my wai gong and po po would
come to me and tell me that everything would be okay and that it was important to not be sad
while eating because food was meant to be enjoyed. Providing nourishment and care is at the
core of my grandparent’s love for me. I am guided by their care and hold deep respect for them,
growing my own life values and principles through learning from these intergenerational
relationships. So, when I ask wai gong about certain seeds he plants in his garden, it is within
these interactions where I understand that seeds are keepers of culture and family histories. They
have the ability to hold sacred stories that can tell us about our lineages and who we are. My
grandparent’s life stories and current ways of life impact mine and I hope to center my wai gong
as a person who practices affirming care, not just with me, but with his friends, community, and himself too.

Ever since my wai gong moved closer to our family, my mom has stepped into a role of supporting my grandpa which has been a lot of labor of making sure he has enough food to eat, scheduling and driving to his medical appointments, and checking up on him daily to make sure he is okay. The intensity of care has been increased by the outcomes of the pandemic and as he ages. The responsibility of caretaking places weighs on my mom, stress manifesting in her body and in her mind. For my wai gong, he is diligent about taking care of himself, but in this same vein, I can sense his worry about his health and safety. I watch my mom be on the phone for long stretches of time throughout the week as she labors navigating frustrating health care systems that put her on hold for half an hour in order to make an appointment for him with various specialists, just to tell her that the next available appointment would be in 4 months. His doctors also don’t speak the same language he does and relies on my mom’s uncertain translation of puzzling medical terms. She tells me how difficult it was to translate everything from the provider to my grandpa at his appointment: “I need to digest all that information and make sense of it first, which is difficult already. Translating it, finding the vocabulary for something medical, and delivering it to an 88 year old is so hard.”

As I reflect on my interests in public health, I have come to understand that when we talk about care, we must examine what system we are in. Community organizer Mia Mingus offers a visual of the medical industrial complex (MIC) as an enormous system that prioritizes and is rooted in profit, rather than “health,” wellbeing, and care. She states, “Its roots run deep and its history and present are connected to everything including eugenics, capitalism, colonization, slavery, immigration, war, prisons, and reproductive oppression… We are not anti healthcare or
science, but are rather exposing the reality that many of us are dependent on the MIC while we are simultaneously trying to change it and ultimately build alternatives to it.”¹ What the MIC encompasses is vast and I only offer a very brief understanding of it in this thesis. As I listen to people’s diverse experiences with the medical industrial complex through conversations with friends, peers, family, and patients, I think a lot about what “care” can look like and be imagined outside systems of exploitation and domination— and what this term can mean beyond what biomedicine markets.

Gwendolyn Wallace’s article from Black Agenda Report, “To Abolish the Medical Industrial Complex,” continues this discussion of our systems of health and medical care as historically and presently rooted in colonialism, capitalism, and carceral logic, and asks who these systems serve:

In the end, white people are only able to secure their own health when they can place it next to the unwavering illness of black people that they create and re-create... For the medical industrial complex, this means having conversations where the point of departure is the truth that Black people know what keeps them well. This means asking friends and family what it is they need to heal. For many, this means uplifting the holistic healing practices of our ancestors with the understanding that care can transcend both space and time. Throughout history, Black liberation has always involved finding ways to ensure the well-being of one another outside of the state and its medical institutions…From the Black Cross nurses who provided Black people with health services and education, to all the Black farmers who belonged to Fannie Lou Hamer’s Freedom Farm Collective.²

¹ “Medical Industrial Complex Visual.”
² “To Abolish the Medical Industrial Complex.”
Wallace shifts the framework away from an individualistic and capitalist understanding of care towards an avenue of thinking that centers a vision for community-based care and collective safety—emphasizing, what responsibility do we have as a society to each other? Mia Mingus shares that there are many things people can do in this work; this can look like supporting healers and practitioners outside of the MIC, creating care networks, or fighting for more accountability within the MIC. Ultimately, when we talk about health care, it should not only encompass and be examined as relationships to hospitals and doctors, but also how wellness and care can be practiced on the community level.

With this, I am guided by these broad-stroked questions: in what ways are models of collective care and community-based health practiced in Asian American communities? How are we taking care of each other and keeping us safe in a fractured system? I draw upon where I have observed these practices of care and what I have learned since the beginning growing up from my grandparents and my mom, which lies in the value and importance of nourishing each other through growing, preparing, eating, and sharing food.

Living in an elderly community home mainly comprised of East and Southeast Asian residents, I can see that my wai gong is greatly cherished by neighbors and friends when we walk around the block. This community of elders can commonly be seen outside tending to their garden plots, full of tender greens that brim over the wooden boxes that hold them in. He tells everyone that I am his granddaughter as we stop to talk to his friends, including those who don’t speak the same language, who regularly socialize with him and bring him food they had made. My mom and I always laugh about how impressed we are and we feel relieved that he has a supportive community. It hasn’t been easy getting to this space, waiting ten years for a spot to open up in this senior housing complex with my mom putting him on the waiting list. I also
understand that isolation within elders is prevalent. Especially during the height of the pandemic and reported anti-Asian violence, I saw that my wai gong and many other immigrant elders were afraid to leave their home in fear of their health and safety—which still persists today. When I call my wai gong, we always start by asking each other how we are, and then I ask what meals he plans to cook that day. In Mandarin, he tells me: “I got bao zi from grandpa’s friend and your mom dropped off niu jing earlier today, and I am about to make a vegetable dish.” From his answers, I can gather and ensure that he is well.

For my wai gong, growing food tethers him to various connections of people and moments. It means having access to heritage crops\(^3\) that are familiar to him and having his own knowledge set of how a certain crop is used, knowing how to prepare it, and the memories of what the crop represents for him because ultimately, food comes with stories. Growing food also allows him to share garden plots with other elders and these spaces become a site of knowledge sharing for them. For example, my wai gong had harvested his 雪菜 which is almost always pickled instead of eaten fresh, and he gave it to his friend who knew how to prepare the vegetable. My mom ended up receiving a mason jar of pickled winter vegetables, which she then tried making herself. Growing food means sharing food—a site of care and wellness that is all inherently community-based. My mom takes care of my grandpa in a multitude of ways such as food sustenance, but his community also takes care of him in small ways too, just as he does back with his community in this flow of reciprocity.

---

\(^3\) Heritage crops, or heirloom plants, are cultivars from a plant that is used for food, preserved and passed down for many generations by farmers and gardeners.
Appreciating my grandpa’s practices of community-based care, I hope to understand some ways of how food growers in the Asian American diaspora are engaging with their practices, how they are engaging with their communities, and how they are taking care of each other. What are some goals and intentions that Asian American food cultivators have in mind, and how do they contribute to determining community health? In order to explore this question, I turn to small-scale Asian American farmers for this inquiry because they produce food for the broader community, and then to Asian immigrant gardens because they hold deep food knowledge. In this project, I lay out the different intentions and priorities of young and older

---

4 This thesis regards the term Asian American as the Asian diaspora in the U.S.
Asian American food cultivators because as evident through various farm missions and studies on immigrant gardens, it is not solely about the action of growing food itself, but the deeper implications that this practice comes with (e.g. cultural reclamation and restoration, intergenerational learning, etc.). These implications are intrinsically linked to the health of Asian American communities, as growing food can bring a better understanding of self, collective commitment to one another, and the places we inhabit.

***

I did not grow up farming or gardening; however, as a freshman in high school, I began to understand how these spaces naturally cultivate community. Food growing, to me, is skill sharing. I learn something new every time, whether it be about learning how to harvest basil or a story about someone’s life. Learning from garden coordinators, volunteers, and my peers, everyone has different bits and pieces of stories and experiences to share with me that I collect and hold.

In high school, I learned how worm composting systems work and got acquainted with our school’s chickens which we named based on their feather colors. I got to learn alongside my closest friends at that time and we harvested the vegetables we grew to give to our school’s kitchen. In my freshman year of college, I learned how Pomona College Organic Farm organized their irrigation system, sifted and turned compost that was gathered from the college, mulched, planted seedlings, set up nets, weeded, and learned from upperclassmen. This transitioned to my friend Ishta and I helping a professor with her garden, as we learned how to prune grapevines, were treated to delicious meals by their family, and watched their golden retriever grow up. When my friends and classmates had the opportunity to engage with Buena Vista Community Garden in South Pomona and Huerta del Valle in the Inland Empire of Southern California
during the pandemic, we learned about their mission of growing accessible food for the local community. Locals would bring their art and host crocheting workshops during Lopez Urban Farm’s Puestecito Night Market while they held an open mic night a few feet away. With the support of the community, there is a lot of labor and effort put into the continuous challenge of receiving grants and fundraising. Last summer in Kings Valley, Oregon, my friend Remy and I worked for a lovely couple at their blueberry farm. I would spend my time flipping through John and Andrea’s binder of recipes that hundreds of volunteers have written and left behind for them over the years, organized and sorted by kind of dish. John would tell us about the constellations in the sky at night and we tied onions to store over the winter during the day with Andrea. We dug potatoes out from the ground and used them in our curry we made for several dinners, learned how to save seeds from coriander and lettuce, and ate the chanterelles that John foraged from the Oregon coast. Lastly, being able to grow food with my wai gong has continued to ground me in who I am. Holding all of these moments of joy and curiosity, I feel so thankful to these communities and the land as we build our relationships, and for continuing to remind me how sacred sharing spaces are.

My experiences of being in different spaces of gardens and farms have taught me technical skills of taking care of the land, people, and animals. These possibilities of learning are grounded in storytelling and listening to lived experiences. With this, I have come to understand that farming and gardening may be practiced in different ways and may mean different things for people in various landscapes, positionalities, and identities.

In Chapter 1, I lay out a brief overview of Asian American relationships to land and labor. I talk about Asian American relationships to settler colonialism, focusing on the context of the U.S. colony of Hawai‘i and the implications of what it means to gain capital on stolen land.
This chapter also includes a brief history of Asian American agricultural labor in California, calling attention to Asian immigrant contributions to the U.S. agricultural system and their exclusions and oppressions in the U.S. at the same time. Chapter 2 introduces current small-scale Asian American farmers and their current methods of farming. Their experiences are woven together in a larger discussion of their challenges and intentions that include topics of land, climate change, cultural reclamation, and continuing historical legacy. Chapter 3 ties back to immigrant gardens and how these gardens are products of migration and movement. Seeing this conscious cultivation of plant nature and culture, garden spaces are examined as sites of autonomy and self-expression for people setting down their roots on unfamiliar land. Centrally, this thesis discusses the power of seeds, and how Asian American food cultivators are practicing community-based care by saving and stewarding seed varieties that are meaningful to them and their communities.
Chapter 1: Asian American Relationships to Land and Labor

Growing food is intimately tied and connected to the land– with this, Asian American relationships to land, particularly unceded land must be contextualized. What does it mean to work and heal on land that is stolen, especially for communities also affected by the colonial legacies of the U.S.? Academically and societally, there is important work addressing the relationships between White settler colonizers and Indigenous peoples. Often overlooked and yet a necessary context to understand is the relationship between people of color living in the U.S. and Indigenous peoples. The historical relationship is not the same as that of White settler-colonizers; however, non-White settlers can contribute to a colonial system made by White settlers. This is especially apparent in our economy when it comes to growing food and farming because the language and mentality on land is one of commodification and ownership. This is fundamentally different from the way many Indigenous peoples view land, where land may be a source of relation. It is an immense reality for Black, Indigenous, and farmers of color to not have access to owning land and not having land tenure, which affect their livelihood, because land has been turned into a site of exploitation and monetary value. There must be a core recognition and understanding of the original stewards of the land, as well as a transformation of how we think about ownership of land towards stewarding and caretaking the land.

Asian immigrants have a formative history in the U.S. when it comes to cultivating land for the agriculture industry, particularly in California where there is historically a large concentration of Asian immigration. Bringing rich agricultural knowledge and wanting to sustain themselves, Filipino, Korean, Chinese, Japanese, Chicano, Punjabis, and other immigrants of different nationalities all helped shape the U.S. food system and developed fertile soil for agriculture. Despite their major contributions of working as hired farmworkers, tenant farmers,
fruit packers, sharecroppers, and more, they experienced immense racism, racist exclusionary laws, and violence. This chapter discusses the historical accounts of Asian American relationships of land and labor in the U.S.; first looking at Asian settler colonialism in Hawai‘i, and then overviewing Asian agricultural labor in California during the 19th and 20th century.

*On Stolen Land*

While Asian American history typically begins with Western colonialism and imperialism’s displacement of peoples from Asia or at the entry point of the Americas or the Pacific, Dean Itsuji Saranillio notes that Asian American histories are seldom placed in relation to an Indigenous history of dispossession by the U.S.. In this section, I examine Dean Itsuji Saranillio and Haunani-Kay Trask’s framework on why Asian settler colonialism matters, in which they situate past and present roles that Asians have played, focusing on the U.S. colony of Hawai‘i, which holds a deep history of Asian immigration and labor.

Understanding specific geopolitical situations is central to understanding settler colonialism, which Saranillio defines settler colonialism as a “historically created system of power that aims to expropriate Indigenous territories and eliminate modes of production in order to replace Indigenous people with settlers who are discursively constituted as superior and thus more deserving over these contested lands and resources.” While Saranillio states that migration itself does not equate to colonialism, migration to a settler colonial space, in which Native lands and resources are contested politically, ecologically, and spiritually, underpins how settler political power of immigrant communities can contribute to a colonial system created by White settlers. This is evident through how paths of success and empowerment, in relation to

---

5 Saranillio, “‘Settler Colonialism,’ in Stephanie Nohelani Teves, Andrea Smith, and Michelle Raheja (Ed.), Native Studies Keywords.”
6 Saranillio, 284.
economics, uphold structures of capitalism and white supremacy that override Native lands and sovereignty. Thinking critically about the political and pedagogical work of White settler colonialism, Scott Lauria Morgensen’s *Spaces between Us: Queer Settler Colonialism and Indigenous Decolonization* asks: ‘Who, under what conditions, inherits the power to represent or enact settler colonialism?’

In Saranillio’s “Why Asian settler colonialism matters: a thought piece on critiques, debates, and Indigenous difference” and Trask’s “Settlers of Color and ‘Immigrant’ Hegemony: ‘Locals’ in Hawai‘i,” their essays draw on how Asian settlers have historically made choices promoting settler interests that comes at the expense of Kānaka ʻŌiwi in Hawai‘i. Poor Japanese, Chinese, and Filipino settlers immigrated to Hawai‘i during the Territory period and were exploited for their labor, working under white sugar planters. However, a narrative of hardwork and being industrious emerged with Asian settlers allowing them to gain traction politically; in other words, Trask writes that the “vehicle for Asian ascendancy is statehood.”

An example can be focused on the concept of American citizenship and full voting rights, as Japanese plantation laborers petitioned to be included in their electoral participation in the new settler government in 1893, arguing that they were equally ‘physical and intellectual’ like other foreigners. The year after, some Chinese also signed the same petition demanding their right to vote. These demands were at odds with Kānaka ʻŌiwi and their resistance petitions in 1897, with ninety percent of the Native population opposing U.S. citizenship throughout the Hawai‘i:

“Kānaka ʻŌiwi did not seek their incorporation into the settler state but rather opposed their

---

8 Saranillio, “‘Settler Colonialism,’ in Stephanie Nohelani Teves, Andrea Smith, and Michelle Raheja (Ed.), *Native Studies Keywords,*” 284.
9 Morgensen, *Spaces Between Us,* 20.
12 Trask, 47.
forced inclusion as U.S. citizens and the consolidation of the White settler controlled Republic of Hawai‘i with the USA through the annexation of Hawai‘i.”¹⁴ This also demonstrates, as Saranillio puts, the complexities in historical oppressions; each group is oppressed by structures of white supremacy but historical oppressions are not the same. These different histories must be situated in complex unity when articulating them—“not flattening difference and assuming they are always in solidarity or falling into the pitfalls of difference and framing these groups as always in opposition.”¹⁵

With this in mind, Asians in Hawai‘i were ineligible to citizenship until the next generation passed during the Territorial period (1900–1959) due to the passing of racist U.S. laws. By 1944, Hawai‘i’s Asian population would be eligible to vote and added to the non-caucasian majority there; thus, White settlers would intentionally strive to set relations and interests with some East Asian settlers. Asian immigrants were also a part of building working class communities that worked to make Hawai‘i a profitable place, and were often conflated with Kanaka ‘Ōiwi experiences. For instance, pamphlets written by Japanese laborers would speak on behalf of Hawaiians, Chinese, Filipinos, and other laborers to bring together non-White working class groups. Through this, the formation of capitalism and the process of ‘accumulation by dispossession’ goes against and eliminates Indigenous modes of production.¹⁶ With the rise of dominance with Japanese, Chinese, and eventually Filipino populations in the islands and overarching Asian success, Hawaiians remain a “politically subordinated group suffering all the legacies of conquest: landlessness, disastrous health, diaspora, institutionalization in the military and prisons, poor educational attainment, confinement to the serve sector of employment.”¹⁷

¹⁴ Saranillio, 287.
¹⁵ Saranillio, 282.
¹⁶ Saranillio, 289.
¹⁷ Trask, “Settlers of Color and ‘Immigrant’ Hegemony,” 47.
of this contributed to a complex transition of White settler to a more liberal multicultural form of settler colonialism. At the same time, Saranillio reflects in his personal self-critique that many Asian immigrants had to work for their survival and lived paycheck-to-paycheck, impacted by White supremacy, capitalism, and U.S. imperialism. There is an understanding that power operates relationally here, going against White and non-White binarism that limits power where one is either oppressed or oppressive.

He ends by stating that “only by learning to work in support of Indigenous peoples ‘can we as Asian American settlers liberate ourselves from our positions as agents in a settler colonial system of violence,’” understanding that he also comes from an Asian settler genealogy of resisting and also colluding with U.S. systems of violence. Putting Asian American and Native histories in conversation may work towards Asian American understandings of liberation as tied to and accountable towards Native epistemes, histories, and aims for decolonization.

**Asian Agricultural Labor in California**

In my inquiry of how small-scale farmers and food growers in the Asian diaspora are currently engaging with their growing practices and how they are engaging with their communities, I start by understanding how Asian American farmers and food growers have historically and consistently participated in the development of the earlier stages of the ever-evolving American food system. While working in agriculture was a form of employment and sense of establishment on unfamiliar land for many early Asian immigrants, many small-scale Asian American farmers now are intentionally farming because they want to for cultural and ecological reasons— not necessarily for financial reasons. However, the legacies and

---

19 Saranillio, 291.
challenges of Asian agricultural workers historically may provide framing and context on what small-scale Asian American farmers and food growers are facing today. Overlapping waves of Japanese, Chinese, Filipino, Korean, and other immigrant laborers of different nationalities fundamentally helped change the agricultural economy and landscape of the U.S., predominantly in California and its concentration of Asian immigration. Cecilia Tsu’s *Garden of the World: Asian Immigrants and the Making of Agriculture in California’s Santa Clara Valley* articulates that in Santa Clara Valley, participation of Asian immigrants in agriculture peaked from 1880 to 1940 and reframed the normative white family farm ideal for their respective communities. In other words, this meant creating their own narratives on what being an American family farmer was and challenging an exclusive white American version with distinct gender roles. For instance, Japanese immigrants viewed farming as a way to have a secure and thriving immigrant society with the intention of settling more permanently in California as family units, while Filipino migrants formed multiracial coalitions in the farm labor movement as a result of major struggles of being poorly paid seasonal agricultural laborers during the Great Depression. The Chinese who came to California were peasants, taking up cultivating because they needed to feed themselves and find employment. Eventually, some became full time farmers as they discovered that farming could potentially create a steady income as opposed to mining for gold, moving to commercial enterprise and not solely subsistence. With this being said, Asian agricultural labor experiences have been vast, carrying its own threads of histories regarding immigration, settlement, and mobility.

---

21 Tsu, 5.
22 Chan, *This Bittersweet Soil*, 79.
From the very beginning, commercial farming in California was shaped through the railroads, banks, and landowners who depended on hired laborers and tenant farmers.\textsuperscript{23} Tsu contextualizes and situates an aspect of Asian immigrant agricultural labor within the backdrop of the white family farm ideal in the setting of Santa Clara Valley, a region with a thriving orchard fruit economy nestled in the center of California. In California agriculture, “diverse forms of land tenure and crop specialization produced region-specific patterns of racial formation and class stratification.”\textsuperscript{24} There was the large-scale industrial farming of the Sacramento-Delta, but also the presence of small family farms that prided itself on relying solely on family labor. The white family farm ideal, Tsu defines, is the labor system that only relies on the work of white men, women and children within the family in the nineteenth century. In reality, many white farm owners hired and depended on Asian immigrant labor for the success of their fields–there was value and pride in being a native-born white American farmer, which actively erased the history of Asian laborers that helped them in their success. As the history of American success lays out, there is the general erasure of folks who farmed their whole lives: “slaves on Southern plantations, Native American cultivators, European immigrant farms initially considered to be of inferior races and not quite ‘white,’ black sharecroppers, Mexican agricultural laborers, and farmers and farm workers of various Asian ethnicities.”\textsuperscript{25} White growers starkly separated themselves from Asians inscribing racial differences, marking that white families only belonged to American agriculture and thus marginalizing Asian immigrants in California agriculture. At the same time, they heavily relied on Asian labor for their farms in the late nineteenth and early twentieth centuries, creating a contradiction in upholding anti-Asian

\textsuperscript{23} Matsumoto, “Taking Root in a Harsh Land,” 20.
\textsuperscript{24} Tsu, “Garden of the World : Asian Immigrants and the Making of Agriculture in California’s Santa Clara Valley,” 5.
\textsuperscript{25} Tsu, 5.
immigration sentiments.\textsuperscript{26} Thus, Asian immigrants were deemed suitable for tedious and labor intensive cultivation that were too menial for whites to do.

While Asian immigrants in the Santa Clara Valley, particularly Chinese and Japanese laborers, were hired to harvest, plant, spray, and pack crops, they were also tenant farmers and sharecroppers because many Asian residents were concentrated in Santa Clara County. As such, a vast selection of horticultural products of berries, orchard fruits, vegetables, and seeds that were integral to how Santa Clara Valley was seen were all cultivated by Asians. This livelihood challenged the white family farm ideal, as white farmers explicitly marked crops and family structure as different between whites and “Orientals” in agriculture.\textsuperscript{27} This sentiment of Asian crops marketed and separated as exotic and “oriental” still persists today in current produce and seed markets. Asian immigrants viewed as menial agricultural workers in marginal crops and their exclusion as aliens unfit for American life preserved and reproduced white supremacy and American national identity.\textsuperscript{28}

Valerie J. Matsumoto’s “Farming the Home Place: A Japanese Community in California, 1919–1982” and Sucheng Chan’s “This Bittersweet Soil: The Chinese in California Agriculture, 1860–1910” continue to trace the external and internal forces, as well as resources, that helped shape the early settlement of Chinese and Japanese immigrant agricultural workers. While Chinese truck gardeners and farmers brought with them vast agricultural knowledge collected by their ancestors through centuries of experience, knowing how to grow in California’s semiarid climate required a different set of techniques that had to be adapted.\textsuperscript{29} This meant that they had to learn how to cultivate crops on land that had summer droughts and less winter rain, as well as

\begin{flushleft}
\textsuperscript{26} Tsu, 6. \\
\textsuperscript{27} Tsu, 7. \\
\textsuperscript{28} Tsu, 7. \\
\textsuperscript{29} Chan, \textit{This Bittersweet Soil}, 79. 
\end{flushleft}
working with soil that was incredibly rich compared to worn out soil in China. On top of understanding the difference in climate, they had to learn how to navigate the land and the market that was unfamiliar to them. For instance, leasing or buying land and dealing with landlords who did not speak the same language, discovering which crops white Americans would buy, and learning to participate or create marketing networks with unfamiliar business practices.

With truck gardeners scattered and prevalent in certain counties, Chinese farmers, farm workers, fruit packers, and commission merchants were the most concentrated in the Sacramento-San Joaquin Delta, where roughly 95 percent of the Chinese population worked in agriculture at the beginning of the 19th century. This aspect of early Chinese soil cultivation in the Delta holds deep history for Asian communities of developing the land into a rich agricultural area, as well as providing the conditions and opportunities to be stable. Undesired swamp land reclamation labor in the Delta was a dangerous and laborious role that came with disease, accidents, and climate danger– Chinese laborers worked this operation to clear the land, as well as breaking up the sod for cultivation of crops, leasing parts of the land to grow these crops, and harvesting them for marketing. It is also fascinating to note that they created their own food supply network that was more aligned with their diet during the construction of the first transcontinental railroad during the late 1860s. White workers ate beef, beans, and potatoes, while the Chinese ate a familiar diet of rice, dried fish, vegetables, fruits, and tea that they transported to themselves; this allowed Chinese workers to avoid some dietary diseases common to white workers. By the time of the Chinese Exclusion Act in 1882, the Chinese made up more than half of California’s agricultural labor force and majority of its specialty crop workers.

---

30 Chan, 79.
31 Chan, 80.
32 Chan, 162.
(specialty crops indicating citrus, deciduous fruits, vegetables, and ‘exotic’ crops). The predominantly male Chinese workers that would accept lower wages than non-Asian workers owed to this flow of agricultural laborers and became feared as competitors from Euro-Americans who owned small farms. Violence and anti-Chinese sentiments drove many Chinese into urban Chinatowns.

Asian immigrants continued to face racist laws with a series of immigration laws that shaped the contours of Asian settlement. Hostility to Asian farmers and laborers was used as an organizing tool for politicians and labor unions, which rallied for campaigns of exclusion of the Chinese in the nineteenth century and the Japanese in the twentieth century in California. On the basis of Euro-Americans fearing economic competition and white supremacy in maintaining a racial caste system, Asian immigrants were met with harassment, violence, and social and legal discrimination. With Japan as a rising world power in the victory of the Russo-Japanese War, the U.S. exercised more caution with Japanese immigrants. Many Japanese families pursued agricultural labor as a way to settle into a community and so that they could raise their children. Starting off as farm laborers, many soon became farmers themselves, leasing their own plots of land and selling their own crops. In 1907, the Gentlemen's Agreement barred the immigration of Japanese male workers but admitted the wives and family members of Japanese already settled in the U.S., however, this was nullified by the Immigration Act of 1924 which legally banned all Asians from migrating to the U.S. Denied U.S. citizenship, political power to exercise civil rights, and a “battery of restrictive municipal, state, and national laws,” “immigration and land laws most affected rural community development.”

---

34 Matsumoto, 24.
35 Matsumoto, 24.
36 Matsumoto, 24.
Asian farmers were met with restrictions in land use in California as the Alien Land Law of 1913 prevented them from buying land or leasing it for more than three years. As the post-World War I period’s conservative ideology on immigrants increasingly focused on dispossessing Japanese of farmland, a law in 1920 barred “‘aliens ineligible to citizenship’ from leasing land or from acquiring it through corporations or in the names of their American-born children,” which made it difficult for Japanese families who had circumvented the Alien Land Law of 1913 by buying land in the names of their American-born children. With these anti-Japanese laws in place, Japanese farmers were immediately forced to scramble in order to keep their farmland. With all the effort and maneuvers to keep their land, “many families lost it and the overall number of Japanese farms plummeted from 699 in 1920 to less than 250 in 1925.”

The origins of Alien Land Laws are rooted in frontier logic– the idea of safety for white settlers that justified their settlement of the United States and viewing Native Americans as threats and transforming them into “savages,” dispossessing Native Americans of their land. For instance, the first territorial governor of Washington Territory, Issac A. Stevens, aimed to remove all Native Americans to reservations and make land available for white settlement in 1855. The territorial government aimed to rapidly increase white immigration with the Indian Wars of the 1850s in order to establish the Territory as a white man’s land. With this, economic growth industries to dominate the local economy was necessary, which required money and labor. Alien land laws soon allowed “aliens” regardless of their residence to work on railroads and transportation passages which made Washington Territory a frontier settlement with

37 Matsumoto, 25.
merchants and growing cities. However, this growth came with conflict and resentments amongst whites. Frustrated white workers perceived Chinese workers as a threat to their economic interests, planting anti-Asian hysteria and campaigns for anti-Alien land laws.

In terms of agricultural land ownership in the U.S., White people account for “96 percent of the owners, 97 percent of the value, and 98 percent of the acres” of all private U.S. agricultural land according to the U.S. Department of Agriculture’s Agricultural Economics and Land Ownership Survey of 1999.\(^\text{40}\) In my search, it does not seem like they held another Agricultural Economics Land Ownership Survey, which is unfortunate because policymakers and practitioners of land-based community development depend on data to make change. As I discuss in Chapter 2, lack of land ownership for non-White farmers is a major concern for them because of several reasons, but mainly the insecurity and possibly of losing their land base altogether. Asian American farm workers today are more likely to be Hmong, Mien, Lao, Chinese, Filipino, or Vietnamese, and locate themselves mainly in the Upper Midwest, Deep South, or the West Coast.\(^\text{41}\) As shared with younger generations of farmers, new Asian American farmers lack access to land and capital, and they are often excluded from ‘profitable marketing channels,’ vulnerable to “wild price fluctuations due to industry consolidation and market speculation.”\(^\text{42}\) Choosing to remain in farming is always an open question because of the insecurity of land.

It must be noted that Asian participation in California’s agricultural development has been integral by bringing new land under cultivation with various crops and providing labor needed to plant, harvest, pack, preserve, and sell crops in almost every major agricultural region in California. For instance, Japanese Americans in California dominated the strawberry fields

\(^\text{40}\) “Rural America Vol. 17 Issue 4.”
\(^\text{42}\) Ichikawa, 284.
and grew significant lettuce, tomatoes, garlic, peas, and much more— to the point where the USDA was unsure about the stability of wartime food supply with Executive Order 9066 authorizing the removal of Japanese Americans.⁴³ Because a lot of green vegetables were part of Chinese cuisine, the shift from grain crop dependence to the cultivation of more vegetables and fruits was incredibly apparent in the U.S. food system and has continued to last. Ironically enough, such Asian American agricultural contributions are erased from dominant narratives whilst white chefs and white food advocates often popularize Asian crops and ‘exotic’ superfoods.⁴⁴ Raj Patel’s “In Stuff & Starved: The Hidden Battle for the World Food System” states that indigenous people, followed by Chinese, Japanese, Filipinos, Mexicans, Punjabis and Oaxacan all brought their own foods, skills, seeds, and expertise that helped shape California’s agricultural history (providing one third of the nation’s food), while facing racism and exclusion. With deep agricultural knowledge, Sikhs, Punjabis, Filipinos, Koreans, Chinese, Japanese, and Chicanos all worked to enrich soil, develop fertile farmland for agriculture, and helped replace the labor shortage in Hawai‘i and the West Coast.⁴⁵

---

⁴⁴ Erway, “How Asian-American Farmers Shape What America Eats.”
⁴⁵ Erway.
Chapter 2: Stewarding the Seeds that Connect Us to our Roots

Case Studies of Small-Scale Asian American Farmers

“These plants carry with them memories of what our ancestors have experienced, from the taste preferences of their community, their stories, and the landscape and climate patterns. At its root, our work to preserve culture and community is one of the strongest acts of resistance against white supremacy. The work we’re doing is about honoring and uplifting our community’s legacy, as well as exploring what that means for folks of the Asian diaspora.”

– Kellee Matsushita-Tseng, National Young Farmers Coalition

Building on the previous chapter’s broad understanding of Asian agricultural labor history, this chapter highlights selected small-scale Asian American farmers: the lineages of how they have come to take on farming, what intentions and goals they have in mind as they engage in these practices, what seeds and crops they steward and why, and what communities they invest in. Here, I introduce Shao Shan Farm and Kamayan Farm, as both collaborators of the Asian American farming collective, Second Generation Seeds; and Farmer Mai, who is the chair of the Asian American Farmers Alliance. These farms and farmers have all played a present and vocal role of being young, small-scale Asian American farmers in media (e.g. social media, news articles). I have also chosen to focus on small-scale farming because working small-scale indicates more community responsibility by working locally, contribution to biodiversity, personal connections to food, environmental benefits, and more. Small-scale farming typically draws on agroecology and organic farming—methods that are based on reciprocity with nature rather than the extraction and exploitation of nature that is characteristic of industrial agriculture.

46 Rosset, “The Multiple Functions and Benefits of Small Farm Agriculture.”
47 “Biodiversity Is Life.”
Shao Shan Farm, Kamayan Farm, and Farmer Mai provide perspectives from current Asian American farming, but not the only perspective. Farmers, farmworkers, food growers, people that grow crops in their homes, and people that do land-based work are vast, and they carry their own experiences and intentions for why they do the work they do. This thesis only seeks to inquire a few, providing a window into small-scale farms in the Asian American diaspora. These stories are collected through research and second-hand interviews (online articles, podcasts, seminar talks on Youtube, farmer websites, social media, blog posts), allowing insight into understanding the intensive labor and intentions that go into Shao Shan Farm’s, Kamayan Farm’s, and Farmer Mai’s practices of growing food and taking care of the land. By first introducing them, their stories are put into parallel with each other in a consolidated discussion.

**Shao Shan Farm**

Up along the coast in the Bay Area, kabocha, gailan, ruby yeol radish, and negi onion seedlings are planted by farmer Scott Chang-Fleeman and his team and watered by the dew left by the coastal fog. By planting crops that thrive in their present geographic climate and utilizing climate altering techniques (e.g. greenhouses, frost cloths) to grow Asian heritage crops that are native to their respective climates, Shao Shan Farm grows for Asian diasporic communities. Using and growing seeds that work to re-expand the diversity of heritage groups in their communities, Chang-Fleeman is part of a collective of local farmers, Second Generation Seeds, that hopes to reimagine crop selections that reflect the Asian American diaspora.

Growing up in Los Angeles, Chang-Fleeman did not have much exposure to farming or gardening. It wasn’t until arriving at University of Santa Cruz where he joined the student garden
co-op as an undergraduate student did he start engaging with these practices, switching his history major towards environmental studies with a focus on agroecology. After interning at UCSC’s farm and garden program and returning to Southern California to take on the role of Pomona College Farm Manager for one year, he transitioned to UCSC’s agricultural program apprenticeship where he ultimately learned the operations of how to establish a farm. During his second year of apprenticeship, with the space and opportunity, he began a personal project that centered on growing Chinese vegetables organically.

In the area between where two greenhouses met, Chang-Fleman set up a trellis and started to plant bittermelon there; in the rows between the orchard alleys, he grew gailan and bok choy. Coming from a biracial Chinese American and white family and as a third-generation Chinese American, this project for him manifested how food and agriculture could facilitate his reconnection to his Chinese American heritage. As he states, it was a deep container for identity, family, and food. Aside from going out to big dim sum banquets and eating what his grandma cooked, Chang-Fleman didn’t have a strong connection to Chinese food. His Chinese American mother would always say that Chinese food was too much work and required a lot of pantry items. One day with his sister in Chinatown, they went into a restaurant; taking a bite out of one specific Cantonese dish reminded him of what his grandma had always made him. This was a big moment for him that catalyzed his interest in becoming more connected with the Chinese side of his family through cooking with his grandma, and then eventually growing the food itself. This project also highlighted for him how up until then, his experience of farming and gardening was more from a Eurocentric crop perspective that leaned on crops like carrots, kale, and chard.

---

48 University of California, Santa Cruz (UCSC) is not a land-grant university, so they are able to invest in alternative food systems and agroecology.
49 Growing Asian Vegetables on the Central Coast of California with Scott Chang-Fleeman.
With an abundance of Chinese vegetables with nowhere to go from his project, Chang-Fleeman got connected through farm manager Darryl Wong to start selling to Chef Brandon Jew of Mister Jiu’s in Chinatown San Francisco. This partnership ultimately made the starting of Shao Shan Farm possible as Chang-Fleeman began to develop local buyer relationships that worked together to see the different varieties of crops and costs needed. Putting hard work into developing Shao Shan Farm, he quickly realized that there was a big demand for organic Asian crops from restaurants, farmer’s market customers, and broader Asian American communities.\(^\text{50}\)

**Kamayan Farm**

“The word kamayan is Tagalog for "with hands" and refers to the ancestral way of eating for Filipinos. A kamayan table is laden with banana leaves and then piled high with an abundance of fresh fruit, vegetables, rice, and sometimes fish or meat. In Filipinx culture, food is love and a kamayan feast is like an altar to the land, community, and ancestors who, despite hundreds of years of colonization, continue to offer us resilience through food. Eating with your hands is both intimate and sacred, reminding us that we are inextricably linked to the land that feeds us.”\(^\text{51}\)

East of Seattle on Snoqualmie people’s land, Kamayan Farm is a small vegetable, medicinal herb, and flower farm guided by building reciprocity and reparative connection with the land.\(^\text{52}\) For Ari De Leña, owner of Kamayan Farm, listening to elder storytelling sparked her curiosity for engaging in farming and its cultural implications. Back when she was an undergraduate student, she visited South Central Farm in Los Angeles with her class; there, an elder shared how he brought corn seeds over the border from Mexico and was teaching his grandson how to tend them. His story brought her a deep longing to understand her culture as a

\(^{50}\) Information from “New Culinary Hyperlocalism” workshop at Pomona College 11/18/2022

\(^{51}\) “About– Kamayan Farm.”

\(^{52}\) “About– Kamayan Farm.”
mixed person with Filipino and Norwegian/English heritage. Slowly over the years, she has come to reflect that seeds and food hold power to tell rich stories about family, lineages, culture, and place. The people who keep these seeds and tend these plants also feed their families and communities, and are thus keepers of their culture. Moved by the idea that seeds and land could be pillars for culture, Kamayan Farm became a home for her to develop that cultural exploration.

De Leña is the granddaughter of a rice farmer by trade as her grandfather came to the U.S. from the Philippines as a migrant worker in California in the 1930s and 40s. However, she grew up mostly on her white side of the family as her Filipino father left the house when she was young with cultural disconnect from his family. While her parents did not farm, her point of connection to identity came from food, and her practices of farming are deeply tied to her ancestral roots. Speaking to her wide-roaming family in the Filipino Diaspora, she shares, “For others who are on this quest, I would say seek out parts of our culture that resonate with you. We have such a vibrant culture and a deep history of art, healing, astronomy, seafaring, weaving, dance, song, growing food, you name it. Find what speaks to you and start yearning for it or practicing it in a small way.” This has manifested for De Leña through growing a relationship to land and food, planting vegetable varieties such as bitter melon, long beans, ginger, garlic, eggplant, sili (Filipino chili peppers), greens, and flowers. Stewarding the seeds that hold connection to her Filipino roots, feeling the soil and earth with her hands, and learning more about the rituals and songs of her ancestors contribute to making sense of her identity and feelings of closeness to her homeland and ancestors.

One thing to note on why De Leña, as a first-generation farmer, chose to farm was because she states that farming is at the intersection of several critical issues on race, class, medicine, and culture, and wants to provide food for her community while having those critical

53 “On the Fly.”
conversations.\textsuperscript{54} With this, she works to build cultural and ecological resilience by healing from trauma and displacement embedded in the U.S. agricultural system.

**Farmer Mai**

For local grains farmer Mai Nguyen, as well as climate researcher, disaster management specialist, refugee resettlement service provider, and co-op developer, they aim to mobilize young farmers to replenish local seed supplies, create alternatives to the industrialized food system, and increase biodiversity and food diversity through farming.\textsuperscript{55} Growing up in San Diego with a very diverse immigrant and refugee population and having worked on sewage and water sanitation projects for disaster relief and refugee camps in Southeast Asia, these experiences have opened up for them understandings of long-term livelihoods of displaced peoples, including their own family who were refugees from Vietnam.\textsuperscript{56} With this, they aim to serve the diaspora community they are from. They state: “Though their home in Vietnam had been destroyed, my family shared these stories and the traditions around them so that they could keep our culture alive in a new place. This is part of why I became a farmer. For me, farming is a way to contribute to this effort of keeping our present in contact with our past and keeping us in touch with each other.”\textsuperscript{57} Their parents were not farmers, but they grew up with a vibrant and robust garden in their backyard which their grandmothers cultivated.

While working on refugee resettlements in San Diego, they bonded with their clients in wanting to be connected to the land. While many refugees didn’t hold title to property, they still wanted to contribute to the land, cultivate and grow food that was familiar to them and feed each

\textsuperscript{54} Ari De Leña on “Why I Farm.” \textsuperscript{55} “Mai Nguyen.” \textsuperscript{56} “About – Farmer Mai.” \textsuperscript{57} “Heart and Grain.”
other, and share that with other people. Through those relationships, for Mai, it reframed for them the politics of understanding what they have agency over and what they can steward, rethinking space and their relationship to land and who has access to it. With a group of refugees, immigrants, and community members, they all attempted to turn an empty neighborhood space into a community garden, as well as the creation of a food pantry, school gardens, and a farm incubator program. These experiences allowed Mai to reflect that food is an important means for refugee resettlement and to resettle creating a home. Food is something that one intimately interacts with everyday.

Getting into farming, they wanted to be a good ecological steward and continue addressing climate, food access, and cultural relevance in their farming practices. Understanding their community’s conditions and positionality, they hope to build a community around their farm based on a two-way conversation.58

***

Discussion: Distinctive Threads

Drawing from Shao Shan Farm, Kamayan Farm, and Farmer Mai, their distinct practices of how they engage in farming are put into parallel: their intentions, concerns, priorities, and how they each handle them. In this discussion section, there are shared threads on topics of **land** (access to land, climate barriers), **cultural reclamation and ancestral food knowledge** (seed saving practices and crop diversity, growing familiar foods for the Asian American diaspora, community relationships), and **continuing the legacy of Asian American farming** (representation in Asian American farming).

---

58 “Mai Nguyen.”
1. Land

1.1 Climate Barriers

Being located on the coast with thick fog and cold weather poses challenges for Shao Shan Farm to grow Asian crops that are typically grown in more tropical regions. A lot of crops that Shao Shan Farm grow are native to southern China, which has a very different climate than San Francisco—so first and foremost, listening to the land and the climate that they are in has led them to turn to cool season Asian vegetables year round, growing plenty of leafy greens, scallions, radishes, and farmer’s market staples. Alongside selecting crops that thrive in their present geographic climate, they also utilize climate altering techniques that have been pivotal in successful growth of heritage plants. Eggplant and bittermelon do not grow well on the coast in Bolinas, but they still try to grow them a little bit every year because of how culturally significant the crops are, using landscape fabric, black plastic mulch to heat up the soil, growing the crops in high tunnels, covering them with row cover to increase soil temperatures, and utilizing the greenhouse to start the seedlings.

However in the 2020 season, Chang-Fleeman made the decision to switch primarily to dry-farming vegetables during that time (which needs coastal influence, healthy soils, deep seeding tools, and correct varieties) due to the lack of water, moving more towards Asian pumpkins and squash. The droughts and wildfires due to climate change has brought about many tough decisions: the inability to irrigate his fields, the persistent wildfires that caused him to shut down operations because of the poor air quality, and the difficulties of land tenure. After 3 years in Bolinas, Chang-Fleeman moved to Green Valley Farming Mill in Sebastopol, CA for many reasons; the main being the drought. In his talk during a workshop at Pomona College that I attended, he mentioned how climate change is altering the foods he chooses to grow.

---

59 Information from “New Culinary Hyperlocalism” workshop at Pomona College 11/18/2022
Similarly, De Leña says that Filipino vegetables are seldom found and grown in Washington because the climate is a lot colder than in the Philippines. To address this, she is hoping to develop varieties of vegetables that are common in Filipino cooking and have the ability to grow well in local climates with Second Generation Seeds. Instead of globally imported Asian crops that contribute to fossil fuel emissions and the industrial food system, growing local, organic heritage crops are important for communities that love them. Growing in the Pacific Northwest, she must find seeds that can endure short and colder seasons, which becomes a lot of trial and error. Alongside these efforts, she finds support from other Filipino growers in how they are accessing certain seeds and their methods of growing them, as well as information on the internet to help guide her farming techniques.

For Farmer Mai, Nguyen’s first year of farming saw the worst drought in California’s recorded history and then experienced massive storms during the winter the next year—seasonal weather continues to alter and be unpredictable for farmers trying to grow season specific crops. How climate change affects seasonal planting is a major problem; Nguyen has had to move spring planting to the fall season because they use a dry farm system that relies on rainfall, which is still not optimal for grain growth. So, they have to constantly adapt and have access to a lot of seeds that can be “planted at different times and have various maturation periods and heights.” Nguyen notes that, like De Leña, growing these seeds requires several trial and errors, which is costly because of water scarcity, land is expensive to work on, and labor is undervalued. However, the reason why they farm is to create an equitable and ecological food system, so they employ and follow distinct growing practices instead of cutting corners. First, they grow locally

---

60 “Why’s It so Hard to Find Locally Grown Asian Vegetables?”
61 “When There Is No Spring – Farmer Mai.”
62 “Decolonize Your Grain.”
63 “About – Farmer Mai.”
adapted grains without the use of chemicals, pesticides, or irrigation systems. In other words, they use drought resistant methods where their seeds can still grow with little rainfall and grow organically without GMO seeds. They use diverse grains that are better adapted to their local climate and thus, more resilient to climate change. Second, they use sheep rotations to manage weeds and horses for broadcasting seed, as these renewable energy methods minimize their carbon footprint. Again, these methods do take more time and labor for Nguyen, as compared to the effects of pesticides that speed up the process. At the same time, in the long run, these farming techniques allow organic matter in the soil to exist and build up instead of stripping the soil of its nutrients with chemicals. Third, they emphasize the health of soil by rotating crops and intercropping with legumes, keeping soil nutrients, soil strata, and microbes intact. While they are guided by these principles, there is a baseline understanding that small-scale farming is a difficult endeavor because access to land and lack of resources for farmers can make the costs prohibitive if they don’t have a lot of start-up capital.

The reality for farming is constantly dynamic, adaptive, and rests in resilience, as demonstrated by Chang-Fleeman, De Leña, and Nguyen. They intentionally do not cut corners by avoiding harmful industrialized farming methods, despite the unpredictable and unsuitable weather. Farming must be constantly changing and adapting depending on the climate and resources given, especially for BIPOC owned small-scale farms that face barriers to resources and land tenure.

---

64 “Mai Nguyen.”
65 “Mendocino Grain Farmers Growing a Local Food Future.”
1.2 Access to Land

Land tenure becomes a barrier for farmers to access programs and tools that can help them invest in farm sustainability and climate resilience, as 97% of farm-owners (2002) and around 95% of producers (people that decide what crops get grown) in the U.S. are white (2017). As Chang-Fleeman doesn’t own the land he farms on, it doesn’t make a lot of sense to invest in costly, long-term, resource intensive infrastructure for his farm, not to mention drastic increases in agricultural land value in the future. Financial assistance also did not provide him much support to cover his irrigation system cost– applying to USDA’s programs did not necessarily help. Therefore, he shares that access to land is one of the biggest challenges for the next generation of farmers in the U.S. and farmers of color. He states that consistent financial support and land access for young BIPOC farmers is necessary for them to thrive– long-term land tenure and government services are important for them to build resilient and sustainable futures in regards to climate change.

With the same sentiment, De Leña states that many Black, Indigenous, and farmers of color are trying to build more resilience in the food system, but “lack access to resources, land, and institutional power to pursue their visions.” The most significant challenge for small-crop farming, she mentions, is finding “viable land at a price point that allows farms to thrive,” as well as the toll that farming takes on the body. Buying land or getting a long-term lease to farm on is difficult, as resonated with the other farmers, especially for young farmers, immigrants, refugees, and marginalized individuals who don’t have access to generational land or wealth. This unfortunate reality reflects the Western colonial legacies of how land inherently operates as a commodity and used as a source to marginalize communities. Working in the agricultural

67 “On the Fly.”
industry is especially difficult in this way because there is a constant push to be successful in order to thrive. With unsupportive government policies and the current infrastructure of the agricultural system, she shares that operating a small farm is not a stable profession—most people who run small farm businesses do it because they believe in its cause. By investing in the livelihoods of BIPOC farmers, whether it be supporting their farms through buying their produce or learning about the history of diverse farmers in the U.S., De Leña states that these investments will ultimately construct a more just and equitable food system.

Nguyen has also experienced much challenge and frustration with finding readily available land as a farmer. They shared with *The Mendocino Beacon* in 2015 that they lost their lease and residence, and that local housing is a challenge for beginning farmers. On top of this, they have experienced that searching for land and getting access to equipment has come with racial discrimination, which is something that De Leña has also experienced. Even though Nguyen has around twelve years of agriculture experience, their experiences, knowledge, and ability are not always taken seriously.68 Ironically enough in the context of agricultural labor in U.S. history, Asian/Asian Americans have deep knowledge, wisdom, and experience with stewarding land. These sentiments that Nguyen and other farmers of color experience are rooted in white supremacy. In an interview with Civil Eats, they said that their white, male colleagues ‘will approach the same landowner and have a conversation and maybe get a response,’ while Nguyen would get turned down.69

Nguyen is also currently a co-director of Minnow, which is an organization focused on securing farmland tenure for farmers of color and Indigenous peoples within the framework of indigenous sovereignty, supporting the “heritage and foodways of those most affected by

---

68 Collins, “A California Bill Takes Steps to End Discrimination Against Farmers.”
69 Collins.
They understand how critical land is for people to sustainably practice their traditional agricultural and ecological worldviews because without secure farmland, farmers cannot sustain themselves and pass on their knowledge to future generations. Recognizing indigenous land stewarding is at the forefront when it comes to their work in reshaping collective relationships with the land and its beings.

One step towards helping socially disadvantaged farmers have more equitable access to land and resources has been through policies and legislation, namely the Farmer Equity Act (2017). The distribution of resources and information does not reflect the diversity of California’s farmers, and this law aims to bring equal access to assistance programs for socially disadvantaged farmers to successfully run their businesses. Nguyen hopes that socially disadvantaged farmers have representation in politics because land is inherently political.

The reality is that BIPOC farmers are aiming to reclaim agency in the food system and on the land that their communities inhabit– while existing in a capitalist economy, in climate change, and ultimately, in an exploitative economy that makes access to land incredibly difficult. Colonization, imperialism, and capitalism have altered common understandings of land and how we relate to the land, and what bends and expands the possibilities for these spaces to thrive lies in community strength and community support.

2. Cultural Reclamation & Ancestral Knowledge

2.1 Saving Seeds and Crop Diversity

To understand our current global food system, we must talk about colonialism’s impact as an ongoing historical process when we engage in topics of food insecurity and crop diversity.
Colonizers viewed “the agriculture of the vanquished as primitive and backward,” which was justification for destroying it. Colonies. Colonial rule in Africa, Asia, and Latin America simplified diversified agriculture with the forced production of cash crops; in other words, agriculture became a means to extract wealth rather than a source of food for local communities, thereby destroying cultural patterns of productions and exchange in which “underdeveloped” traditional societies have built through thousands of years. This production of cash crops was forced using two strategies: physically or economically forcing local populations to grow cash crops on their own plots instead of their own sustenance and then bringing them to the colonizer for export, and directly taking over the land with large-scale plantations that grew these cash crops to be exported. This process “sowed the seeds of famine.”

This destruction of food and agricultural systems by global corporations remains highly consistent. Activist and scholar Vandana Shiva states that the industrial economy’s definition of ‘growth’ is ultimately a form of theft from nature and people and uses the concept ‘growth’ to mask the creation of scarcity. A lot of money is poured into “scientifically improving” seeds and finding solutions to make seeds more genetically stable than traditional varieties. More money is poured into this business when giant seed companies merge and acquire other agricultural businesses. This growth allows concentrated corporate power over the seed industry, agricultural industry, and suppresses farmer choice and livelihood. The agribusiness industry that dominates control in the seed and agrochemical market currently consists of “The Big Four” as of 2022, which has gone through recent merges and acquisitions: Bayer (acquired Monsanto), BASF, Corteva (Dow/Dupont merger), and Chem-China (acquired Syngenta AG). The Big Four

73 Lappe and Collins, “Why Can’t People Feed Themselves.”
74 Lappe and Collins.
75 Lappe and Collins.
77 “The Big Six to the Big Four.”
controls an estimated 67% of proprietary seed sales and 70% of the agro-chemical industry.\textsuperscript{78} With these powers bolstering agricultural industrialization, these firms affect far more than economic boundaries, damaging livelihoods, communities, and ecosystems in their pursuit of money. Global market expansion eliminates local economies and cultures by implementing domestic markets with cheap imports that steal local markets and livelihoods from local farmers and food processors. Biodiversity and cultural diversity food become lost to monocultures.

It is through local cultures and markets that have contributed to allowing crop diversities to exist because sowing diverse seeds allows them to be conserved. For over 10,000 years, “farmers have worked with nature to evolve thousands of crop varieties to suit diverse climates and cultures.”\textsuperscript{79} For instance, China used to have 10,000 wheat varieties grown; by the 1970s, only 1,000 persisted. There are foundations to diverse food cultures globally: “The maize-based food systems of Central America, the rice-based Asian systems, the teff-based Ethiopian diet, and the millet-based foods of Africa are not just a part of agriculture; they are central to cultural diversity. Food security is not just having access to adequate food, it is also having access to culturally appropriate food.”\textsuperscript{80} This is why seed saving practices are important for diverse food cultures because seeds are life. This process of seed-selection, saving, and replanting has been practiced since the beginning of agriculture and is a gift of nature used by farmers to produce food for people. The industrialization of agriculture and increase of corporate power works to eliminate this practice. Knowledge that cultivators have developed and conserved, regarding seeds and food, is the collective outcome of several farming communities throughout several generations.\textsuperscript{81} They are stewards of biodiversity. For seed keeper Amirah Mitchel, she states that

\textsuperscript{78} “The Big Six to the Big Four.”
\textsuperscript{79} Shiva, “The STOLEN HARVEST of SEED,” 79.
\textsuperscript{80} Shiva, “SOY IMPERIALISM and the DESTRUCTION of LOCAL FOOD CULTURES,” 21.
\textsuperscript{81} Wright, “Locating a Politics of Knowledge.”
seed saving plays an intimate role in preserving African American culture, “a bridge between the overlooked past and a regenerative future.” For her, she states that it’s important for people of color, particularly African diasporic people, to have access and control over their own seed systems: “No one else is going to protect our heritage and well-being the way we will for ourselves.”

This discussion is relevant because farmer Nguyen ultimately seeks to expand grain diversity and grow Southeast Asian heritage grains for their community of refugees and immigrants so that their community can have storable and staple crops that are core to their diet and food security. There are not many farmers growing them, so they have sowed their own heritage grain crops using no-till, dry farming methods and sheep rotations. Nguyen states that their family of refugees from Vietnam come from a country that does not exist anymore and that various cultural practices are dying— and seeds have the power to bring “some semblance of home.” They credit immigrants and refugees for nurturing diverse seeds and they work with a growing movement of farmers, bakers, and consumers to restore grain diversity. Nguyen uses a variety of “ancient” and “heritage” grain varieties, as well as new varieties to better adapt to local growing conditions and are resilient to climate change. Some of these seeds are named ‘Sonora,’ ‘Kamut,’ ‘Emmer,’ ‘Spelt,’ and ‘Einkorn,’ holding properties such as higher antioxidants and easier digestion.

As collaborators of Second Generation Seeds, Kamayan Farm and Shao Shan Farm are also devoted to helping communities in the Asian diaspora deepen their cultural heritage through seeds. This collective believes that “seeds are storytellers and protectors of our traditions. In

---

82 Mok, Mok, “The Preservation of Culture Begins With a Seed.”
83 Mok.
84 “Mendocino Grain Farmers Growing a Local Food Future.”
85 “Mai Nguyen.”
86 “Decolonize Your Grain.”
choosing to grow and save seeds each season, they remind us of our collective memories. We commit ourselves to keeping those memories alive for generations to come.

By understanding certain growing characteristics of heritage crops and regional culinary preferences, they select and improve on heritage crop varieties to honor their lineages. With in-person events and an online network called *Seed Stewards*, they provide space for seed stewards to share and learn how a specific crop is grown with sowing and cleaning tips. Storytelling sessions are facilitated to highlight how specific heritage crops have played a role in histories and traditions. For example, Chang-Fleeman discussed how he grows annual leaf chrysanthemum from seed to seed in their virtual monthly Seed Stewards potluck, where he covered topics of growing requirements, market potential, and the cultural, economic, and agroecological role that leaf chrysanthemum plays. De Leña also hosted a bittermelon cookalong and shared how she grew ampalaya on her farm. While they each specialize in certain crops, it is ultimately a collective of Asian American growers that work together to keep seeds alive in ways that honor the seed’s current evolution and stories while keeping their origin present, and so that their communities can love and cherish them.

2.2 *Growing Familiar Foods*

Asian produce varieties in the United States are often coined as ‘exotic,’ ‘oriental,’ or unusual in the market to create a ‘shock-factor’ buzz interest at farmer’s market stands, says Chang-Fleeman, which has served to reinforce the stereotype of Asians in the United States as perpetual foreigners. In many seed catalogs, many cultural crops are marketed as rare and appropriated by white-owned agricultural companies, presenting inaccurate representations of

---

87 “Asian Heirloom Vegetable Seeds.”
88 “Kellee Matsushita-Tseng on Instagram.”
the ubiquity of these food crops.\textsuperscript{89} This has contributed to the concept of ‘superfood-ing’ in many produce markets, which promotes the idea that these foods are brand new discoveries with unique health benefits, ultimately thrusting cultural foodways into capitalist mechanisms for corporal profit. To give an example, Baker Creek Seed Company exotifies any kind of cultural crop (e.g. non-white food regions) and homogenizes their seeds as ‘rare heirloom crops.’ These harmful representations work to racialize Asians as ‘Others’ and disempowers Asian American producers, continuing the industry’s long history of exploiting Asian American growers.

In an interview with \textit{Eater}, Chang-Fleeman says, “I think being able to start a farm that’s so vocal about growing Asian produce by Asian workers with the intention to sell it to Asian folks is important. I’m not growing them for people to think that’s cool, but for Asian American people who think it’s a link to their history.”\textsuperscript{90} With this, he spends a lot of time talking to farmers and understanding what people want to buy in the winter, and going to markets to see how much people are willing to pay. Knowing what crops to grow is facilitated by cultural relevance, and accordingly, if people want it. For instance, with several seedlings of bok choy varieties in his hand, he had observed that people who have a relationship with Asian vegetables would not recognize or buy ‘joi choy’ because joi choy grows to an incredibly large size– bok choy used in Chinese dishes and in restaurants tend to be small varieties. Learning from these experiences allows him to navigate region-based preferences. While growing Asian heritage crops started out as a personal project for Chang-Fleeman’s own self, Shao Shan Farm has blossomed into a space that develops community and family relations. It has given him a lot of purpose as the farm works to provide accessible certified organic Asian vegetables in the Bay

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{89} “Growing Heritage and Healing through Traditional Asian Vegetables.”
\item \textsuperscript{90} Erway, “How Asian-American Farmers Shape What America Eats.”
\end{itemize}
\end{footnotesize}
Area, create meaningful connection to land, family, and culture, and preserve seed varieties that may not be as common.

Kamayan Farm grows intentionally for Filipino and low-income communities; their vegetables can be found at Filipino café ‘Hood Famous’, chef Melissa Miranda’s Filipino restaurant ‘Musang,’ Filipino American restaurant ‘Archipelago,’ Seattle nonprofit Rainier Beach Action Coalition, and Farms for Life. It is a part of Kamayan Farm’s vision to restore and relearn what growing ancestral foods means, and this inherently means uplifting Filipinx food and culture. A way that they accomplish this is by hosting workshops at the farm for community members to come and learn meaningful land-based skills. Through hosting a rice planting ceremony in the spring of 2022, the practice of tending Upland rice folds in ancestral legacy and regrows a closer relationship with the plant. As rice is a central element to Filipinx food, for people who have a familial connection to rice, De Leña shares that to experience growing it brings about a feeling of coming home and understanding where one comes from. It also physically provides a space to be in community and with people who understand the importance of this crop, celebrating the ways in which they grow together. De Leña works to cultivate memory, as well as imagination, of familiar and beloved foods. She tethers the production of crops and seeds to her community.

Nguyen grows Southeast Asian crops organically because they want to enable people in their community to have access to food that has nourished them for thousands of years without harmful herbicides and pesticides. They are incredibly intentional, as stated earlier, to not use herbicides and pesticides for ecological and health reasons, and particularly as there is a connection to the context of the Vietnam War with Agent Orange. They want their Vietnamese community to have locally grown, culturally relevant crops and to be healthy. Especially for

91 “Ari De Leña (@kamayanfarm) • Instagram Photos and Videos.”
refugees that are resettling and building their lives in an unfamiliar place, they want them to be able to taste home without compromising their health through harmful farming methods. Nguyen says that Asian Americans make up 15% of the California population, but only make up 0.6% of California farm operators, so they want to meet the needs of people who eat foods that bring comfort and familiarity. They also say that many people who have bought grains from them either had or know others who have had a diet-related illness, and have turned to Nguyen’s locally grown whole grains.

It is evident that these three farms operate with nurture, care, and connection alongside the communities they care about. While the labor of farming is tedious and hard on the body, the value of the work is powerful and tender. Focusing on culturally relevant nourishment is central to their work, inviting others to build close relationships to land with meaningful food that connect people to each other.

2.3 Community-Supported Agriculture and Community Relationships

Kamayan Farm and Farmer Mai contribute to community-supported agriculture (CSA) and provide shares for their local community. CSA is a farming model where traditionally, a consumer buys a share of the farm up-front and receives a consistent box of fresh produce (i.e. a subscription program). This model was first established by Dr. Booker T. Whatley, a Black farmer and agricultural professor, in the 1960s. CSA provides financial security for the farmer for that season, allowing transparency and benefits for both parties. As stated earlier, it is difficult for small and medium-sized farms to thrive in the landscape of our giant industrialized farming system and they cannot compete with the massive production and low market prices of

92 “About – Farmer Mai.”
93 “Veggie + Flower Shares.”
industrialized farms. Generational knowledge is lost when these small farms go out of business, so the way that CSAs operate ultimately supports restoring sovereignty to farmers. Instead of being an open, anonymous market where farmers don’t know where their produce is going to, developing direct relationships by knowing who their consumers are allows for trust and transparency for both parties. Consumers know how their food is grown and the share typically costs less than grocery store purchases due to a direct relationship. The CSA movement in the U.S. emerged from farmers who steward the land using organic farming techniques, offering environmental benefits as well.

For Kamayan Farm, their weekly veggie boxes often have vegetables used in Filipino cooking, such as bitter melon, long beans, chili peppers, lemon grass, and ginger. These veggie boxes run during an 18-week growing season from summer to fall, and are received by consumers through local pick-up sites. They also provide weekly flower shares that members can sign up for. De Leña states that the coronavirus pandemic has highlighted how unstable and harmful our food system that constantly imports food globally can be for many people. Scarcity with supply chain breakdowns has been evident at grocery stores, and many people have started to turn towards investing in local food systems. So, a bulk of their produce go to CSA veggie box members that sign up for a share, and community-based organizations that directly distribute food towards community members, mutual aid projects, and nonprofits.

Farmer Mai runs “Flour Shares,” which is similar to the CSA model. It involves a “one-time payment for monthly packages of freshly milled flour over six months.” Aside from their Flour Shares, they noted that what makes farming so meaningful for them is the

---

94 “What Is a CSA?”
95 Maddela, “Farm to Table Kamayan Farm-Style.”
96 “On the Fly.”
97 “A Glimpse at Going Against the Grain – Farmer Mai.”
connections and community they build. They prioritize building strong relationships with millers, bakers, farmers, and consumers for several reasons. It’s important for Nguyen to have a direct relationship so that consumers know the ethics and process of food production—this reorients relationships to food and land, which the dehumanized industrialized food system has worked to break. There is a lack of connection and appreciation for farmers cultivating the land and producing the food that sustains us. Working with bakers and small-scale farmers, they have helped build a market for diverse grains called the *California Grain Campaign* to strengthen relationships along the supply chain to ensure that everyone along the chain earns a living wage, as well as ensuring grain farmers have a voice in what happens to their product during processing.

Furthermore, Nguyen emphasizes that communities are ultimately networks of care that marginalized peoples particularly lean into. Coming from a family of refugees, they did not have such political representation, resources, institutional support, or shared language coming to the U.S., so working together as a strong community to meet their own needs was understood from the beginning. Their community takes care of each other, especially in the face of anti-immigrant and racist policies, whether it be helping each other get access to equipment or sharing relevant seeds.

3. Continuing the Legacy of Asian American Farming

3.1 Representation in Asian American Farming

Alongside being a supplier, Shao Shan Farm actively seeks to employ beginning, aspiring young Asian American farmers. As mentioned previously, those of Asian descent made up 0.6%
of farm producers in the U.S., while white people made up 95.4% according to the USDA 2017 census.\textsuperscript{101} This number is contrary to the reality of how Asian laborers were integral to the development of farming earlier on in the U.S., with immigrant laborers bringing agricultural knowledge and farming techniques that changed California’s agricultural landscape forever. With Asian immigration historically situated predominantly on the West Coast, contributions to the food system were pivotal, planting plenty of strawberries, lettuce, tomatoes, mainstream vegetables and orchard regions.\textsuperscript{102} Our reality of a white dominated food system was intentionally created to be that way, as the U.S. continues to exploit marginalized communities for labor and then driving them out of the country; in terms of Asian American agriculture, the Chinese Exclusion Act of 1882 and the incarceration of Japanese Americans are examples of that exploitation. For Chang-Fleeman, employing Asian American farmers and being a farmer himself aims to continue the legacy of Asian American agriculture. He understands the historical and current realities of farm work. Compensating all labor (in an industry that continues to devalue and exploit labor), hiring diverse applicants, investing in training for beginning farmers who face barriers of entry to the industry, providing proper workers comp protections, and rejecting the agricultural exemption for unpaid overtime are principles of Shao Shan Farm.

For De Leña, she shares that there is something magical in being able to continue a legacy of growing and eating food in a way that feels connected to what her ancestors who were land workers used to do. With so much food knowledge that has been lost through U.S. imperialism and colonization, it feels regenerative and healing for her to be actively relearning land-based skills and working the soil. Food is a direct way to transmit culture. De Leña also continues to emphasize that there is a constant erasure of the histories and legacies of Asian

\textsuperscript{101} “2017Census_Farm_Producers.Pdf.”

\textsuperscript{102} Ichikawa, “14. Giving Credit Where It Is Due.”
people cultivating land, so she is trying to reshape the narrative of what farming looks like because there is the old, white male caricature of how people depict what farmers look like in the U.S., when this is vastly misrepresented because most of the farmers in the world are women of color. By hosting workshops, growing heritage crops for her local community, and working with Second Generation Seeds, De Leña works to continue this legacy.

Lastly, Nguyen is a farmer organizer, and what that means is that they support many beginning farmers that include refugees, immigrants, or young farmers who might not have the resources to buy their farmland and start their farm. This is shown through cooperative solutions, combining finances with farming skills to enable more farmers to start their farms. As the head of the Asian American Farmers Alliance, they also support Asian American farmers with logistics, access to seeds, and advocacy. For Nguyen, farming is a way to transform the landscape in ways they want to see by utilizing sustainable climate models and by growing healthy food for and with people.

Much of the history of how immigrant laborers shaped the fertile soil is often undermined and does not reflect the current demographics of who farms in the U.S. today. Asian American small-scale farmers today are intentional about continuing the legacy of Asian American farming. While Asian agricultural laborers historically cultivated food for economic and sustenance purposes, these three farms and farmers show that cultivating food and land is more about restoring cultural and ancestral practices and knowledge, as well as finding ways to heal relationships with the land.

103 californiagrown, “Meet a Farmer.”
Chapter 3: What can we learn from our Elders?

Cultural and Ecological Resilience in Immigrant Gardens and Seed-Food Preservation

My grandpa is not a farmer, but I consider him as someone who, like forementioned young small-scale Asian American farmers, cultivates food for his community in the Asian diaspora. These same tenets of food cultivation—growing familiar food that are culturally relevant, sharing food with members of their community, preserving certain flavors and histories— are shared between these younger and older generations in the Asian American diaspora, albeit in different structures of being commercial and non-commercial. When I walk through my grandpa’s living center, I see lush and flourishing gardens and planter boxes fluttering with vegetables and flowers tended by the hands of immigrant elders. This shows me that elders hold deep, diverse knowledges of growing. While they may have different reasons and may be nothing deeper than just enjoying the task, I see these vegetable beds as spaces of cultural resilience.

This chapter draws together an intergenerational lens of food growing. For farmer Mai Nguyen, both their grandmothers grew produce in their home gardens and composted in their backyard; it is from their grandmothers where they understood a holistic sense of farming and food as medicine. For farmer Scott Chang-Fleeman, his cousin’s family were Chinese farmers in the Central Valley and they gave him seeds collected inside of a shoe box and Chinese shallots from their grandma who had passed. For farmer Ari De Leña, her interest in farming sparked in 2006 when she met elders at a farm in South Central Los Angeles and their wisdom and seed saving practices initiated her interest in food equity and sovereignty. These dynamics show that

---

104 Erway, “How Asian-American Farmers Shape What America Eats.”
elders are often seed keepers, preserving seeds and food knowledges in their own ways that contribute to their own health and community health.

Immigrant gardens are places that embody cultural and ecological resilience—a self-made space that has the ability to ground people in their sense of home and family through self-determination and cultivation. This chapter first lays out the health implications of elder Asian immigrant populations and the importance of place, then moves towards immigrant relationships with gardening and how immigrants shape the landscapes around them. Following this, current community work that focuses on building intergenerational relationships and food sovereignty is addressed because it must be acknowledged that Asian American communities already have been and are taking care of each other in their own ways on the community level.

1. Background

1.1 The Importance of Place

Many scholars have studied the connection between people and place, with literature explaining how places are “profound centres of human existence”\(^{105}\) deeply embedded in distinct sentiments and meaning that anchor and provide stability and belonging for individuals.\(^{106}\) For immigrants and refugees, leaving behind significant places and “place loss” due to displacement, relocation, destruction, and migration can create immense grief and negative consequences for health.\(^{107}\)

Configurations of Asian migration and settlement to the U.S. are uneven across time and place; with war and political upheaval around the world and linkages to labor markets, Asian

---

\(^{105}\) Seamon and Sowers, “Place and Placelessness, Edward Relph.”; Mazumdar and Mazumdar, “Immigrant Home Gardens.”

\(^{106}\) Mazumdar and Mazumdar.

\(^{107}\) Mazumdar and Mazumdar.
migration to the Americas has “historically been a multiclass phenomenon.” The restructuring of global capitalism has displaced and dislocated people into a global labor market. U.S. imperialism and settler colonialism has also continually displaced families and individuals from their homelands. Ultimately, “the narratives of Asians in the Americas form an extraordinarily rich, complex, and contradictory tapestry of human experience.” The Asian American diaspora is vast, with immigrants and following generations holding distinct experiences of their movement.

1.2 Older Asian Immigrant Health

For immigrants who migrate after the ages of 65, it is often due to family reunification and refugee admissions. As a result of this and the aging of long-term foreign-born immigrants, the Asian population living in the U.S. aged 65 and older in 2019 was an estimated 2.49 million according to the U.S. Census Bureau, and is projected to grow to 7.9 million by 2060 according to the Administration for Community Living.

Adjusting to an unfamiliar place can be especially hard for older immigrants because of individual and social factors such as “language barriers, cultural differences, discrimination, and evolving familial caregiving dynamics,” making them vulnerable to loneliness and social isolation. Particularly for people who migrate later in life, they become disconnected from ways of life that they are familiar with and often experience lack of community networks and financial resources as culture shapes individuals’ experiences and livelihood. Loneliness and

---

108 Anderson and Lee, “Asian American Displacements.”
109 Anderson and Lee.
110 “2020 Profile of Asian Americans Age 65 and Older.”
111 Lai et al., “Effectiveness of a Peer-Based Intervention on Loneliness and Social Isolation of Older Chinese Immigrants in Canada.”
112 Hossen, “Social Isolation and Loneliness among Elderly Immigrants: The Case of South Asian Elderly Living in Canada.”
social isolation are major public health issues that affect this population and can affect the quality of life for older immigrants by causing physical and/or mental challenges.113 There have been many findings that loneliness is associated with adverse health outcomes and mental health conditions, such as developing major chronic illnesses, worsening immune function, sensitivity to threats, depression, and anxiety.114 A meta-analysis of associations between social isolation and/or loneliness and Asian older adult wellbeing showed that many of them who were socially isolated and/or lonely felt “‘sad, ‘suffocated,’ ‘depressed,’ ‘lonely,’ and empty, experienced ‘painful feelings’, and would rather ‘sleep [these feelings away]’ or live ‘on a day-to-day basis.’”115 Feelings of neglect and exclusion came up with not feeling protected and supported by society. Government services also fail to support immigrants, as they face challenges of housing rights, financial insecurity, and public transportation.116

With this, they are less willing to utilize institutional health services with reasons of having language and cultural barriers, cultural beliefs, and family shame.117 In my experience with working at Asian Health Services in Oakland Chinatown, California, I saw that a lot of elders miss their appointments, which has been further exacerbated by the coronavirus pandemic and reported anti-Asian hate. As many things are getting transferred digitally, such as telehealth, many elders do not know how to use technology either. If they don’t have support with transportation, technology, and language, which typically comes from their adult children, then it

---


115 Shorey and Chan, “The Experiences and Needs of Asian Older Adults Who Are Socially Isolated and Lonely.”

116 Shorey and Chan.

117 Park, Jang, and Chiriboga, “Willingness to Use Mental Health Counseling and Antidepressants in Older Korean Americans.”
might be difficult to even make an appointment. Many late-life immigrants tend to join their children in the U.S., relying on these relationships to get around due to financial conditions and expectations of care.\textsuperscript{118} However, recent research finds that elders still tend to spend time alone because of the busy schedule their adult children have in Chinese immigrant families.\textsuperscript{119} Especially if their children’s generation moved out of the house, older people perceived themselves as outgrowing their physical and social environment, which contributed to feelings of alienation and distance to society; there becomes a generational gap.\textsuperscript{120}

Understanding these compounded issues, immigrants should not be viewed as passive subjects, as many researchers have tended to frame them as victims of ‘socio-historical shifts’ especially with older Asian immigrants, but as resilient and having agency. Many adapt to unfamiliar life by working towards establishing routines for themselves, a sense of normality, and stability, such as through growing food and gardening.\textsuperscript{121}

1.3 Immigrant Relationships with Gardening

Many friends and families in the Asian American diaspora that I know have their own vibrant gardens—why is that? There is a common narrative in studies of immigrants being inserted into a new space and learning to assimilate to dominant culture, being “uprooted” and then “transplanted,” which frames immigrants as passive subjects when in fact immigrants are incredibly agentive.\textsuperscript{122} In this section, I hope to highlight agency within older Asian immigrants

\textsuperscript{119}Li, Xu, and Chi, “Challenges and Resilience Related to Aging in the United States among Older Chinese Immigrants.”
\textsuperscript{120}Wong et al., “Illuminating the Psychological Experience of Elderly Loneliness from a Societal Perspective.”
\textsuperscript{121}Graham and Connell, “Nurturing Relationships”; Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
\textsuperscript{122}Hondagneu-Sotelo, \textit{Paradise Transplanted}.  

54
in how they “(re)create a sense of home” and utilize gardening as a practice to create feelings of familiarity and continuity in the migration process, which can be a disruptive experience invoking dislocation and loss. This brings about a perspective on “the immigrant as a gardener– a person who shapes the world rather than simply being shaped by it,” creating their own landscapes through cultivating seeds and plants in their own distinctive ways. Because people’s everyday actions in distinctive places construct who they are, physical spaces and actions such as growing food in gardens can help facilitate older Asian immigrants in grounding “who they are and where they belong.” Ultimately, immigrant gardens demonstrate the creation of landscapes as tied to memories of the past and anchors to an unfamiliar present, carving out culture space, ecological space, religious space, space for multigenerational learning, and wellness.

1.3.1 Home Making: Culture and Ecological Space

Looking deeper into the history of immigrant gardens, gardens were of great importance for immigrants who came to the U.S. as miners and laborers. With the labor of mining occurring typically in isolated spaces, gardens played an important role in sustaining local populations and easing the psychological strain that comes with migration: “the gardens they formed and worked provided a link to their past and culture. One’s personal schedule may have been regulated by clocks, whistles, foremen, and shift bosses, but a garden continued to reflect the timeless and continuous processes of nature that spanned national, political, social, and

---

123 Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
124 Hondagneu-Sotelo, Paradise Transplanted.
125 Hodgetts et al., Social Psychology & Everyday Life.
126 Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
127 Mazumdar and Mazumdar, “Immigrant Home Gardens.”
128 The Meaning of Gardens.
Becoming more than just a place to grow food, gardens can serve as a refuge from the stress experienced in immigrant lives and hold social and psychological benefits, as explored in social scientific research. They offer compensation for lost worlds and provide stability towards immigrant transitions from their homeland to a highly industrialized U.S. society.

For instance, for Hmong refugees displaced by war, many have been moved from their land-subsistence and farming life, resettling in large urban areas with very little to no spaces for gardening or farming. With opportunities found in tiny plots of earth in places such as community gardens or some private backyards that residents have opened, these have given Hmong refugees a space of familiarity that could provide a link to their past and cultural heritage. Being able to grow familiar vegetables, herbs, and medicines that they know allows them to create a sense of home and sense of ownership in changed environments. At the same time, these familiar foods can also be sad reminders of their homeland and the lives they have lost, as expressed by Hmong gardeners according to an ethnographic study.

For Chinese immigrants, creating continuity in their identities and lives through gardens provides feelings of wellness and connectivity against the backdrop of disruptive barriers, such as language barriers, loss of social ties, and social isolation. The practice of cultivating food transcends barriers of language, brings about a space that is outdoors instead of indoor urban apartments, draws on food growing knowledge and skills familiar to immigrants, and becomes a social outlet that can ease feelings of isolation.

---

129 The Meaning of Gardens, 164.
130 The Meaning of Gardens.
131 Graham and Connell, “Nurturing Relationships.”
132 The Meaning of Gardens.
For immigrants who have saved and brought seeds from their homeland, these seeds and vegetables can function as containers of memories: “Vegetable beds index another place and time into the present and materialize memories. Thus the roots of a garden spread out through time and space providing grafts between the past, present, and future.”133 By thinking of those memories, it brings with it an associated physical space.134 Engaging with this memory work can facilitate reconstruction of the self and help the process of home making. Gardens are an outward expression of immigrant “history,” “tastes,” “preferences,” and “skills,”135 ultimately shaped by a swirl of ideas, plants, people, and seeds.136 Because of this, gardens reveal so much and tell a story about the people who make and inhabit them. As sociologist Pierrette Hondagneu-Sotelo writes: “These acts of migrant creation are projects of self-expression and social creativity… gardens as a form of storytelling, as individual and community efforts to shape outdoor surroundings and plant nature.”137

At the same time with being a place of memory, physically planting down their seeds is an indication of setting down their roots in a new place. It is an action of creating new ties to a place, suggesting that immigrants are actively engaging in creating a space for themselves to become rooted in new land and “experience the new landscape ecology in a deeply meaningful way.”138 By sowing these seeds and tending to their plants towards its harvest, this labor of love and investment in cultivating plants brings about a sense of belonging, accomplishment, and groundedness that contribute to their wellness.139

133 Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
134 Gross and Lane, “Landscapes of the Lifespan.”
135 Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
136 Hondagneu-Sotelo, Paradise Transplanted.
137 Hondagneu-Sotelo, 4.
138 Mazumdar and Mazumdar, “Immigrant Home Gardens.”
139 Mazumdar and Mazumdar.
1.3.2 Networks of Care & Multigenerational Learning

As stated before, growing food means sharing food. Gardening helps immigrants build social relationships and networks of care. Giving and exchanging vegetables and fruits to neighbors becomes a form of communication and appreciation, especially between people who don’t share a common language or culture. It is a form of contact in their immediate neighborhood and community, whether it be sharing something homemade, sharing gardening techniques, cuttings, equipment, an abundant harvest, or seeds. There is also a network of sharing seeds throughout the country, as another Hmong gardener, Bai, shared: “My seeds, I just get them from my friends and I just ask them where do they get them and they say from friends, and I give them seeds next year. I save my seeds and I can share with whoever. I believe we just brought them from our country.” Similarly, cuttings are shared within families and close friends that allow immigrants to grow distinct fruits and plants.

Practicing traditional ceremonies are important to feelings of well-being and contribute to the continuation of culture, and gardens are a place for multigenerational learning. Elders and parents can teach and pass down “history and culture from generation to generation.” One Hmong gardener, Sa Lia shared, “We like to teach every child to grow some food like cucumber, cabbage, and squash. We like to teach the Hmong culture and Loatian culture because the grandfather and grandmother used to teach everybody.”

140 Wen Li, Hodgetts, and Ho, “Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand.”
141 The Meaning of Gardens.
142 The Meaning of Gardens.
143 The Meaning of Gardens.
2. Preserving Seeds, Preserving Life

Asian immigrant gardeners are doing the work to hold onto seed varieties and practices that are meaningful in their own contexts, making them seed savers. They save and pass along seed varieties with informal networks that they have come to organize themselves, and these seeds preserve and represent memory, identity, and livelihood that are important for biodiversity and community health. Seed savers who are collecting, exchanging, and planting seeds with neighbors, kin, family, or friends are resilient in providing a “realm of possibility instead of surrendering to a discourse of loss” regarding biodiversity and cultural diversity. Carving out spaces for themselves, the seeds planted in gardens and farms reflect the people operating them and come with life stories, shaping the celebration of foods, traditions, and cosmologies.

With this, I argue that learning from seeds can deepen and enrich community commitment and the places we inhabit, embedding people in (intergenerational) relationships of care and thus, allows us to look at lineages and stories of how communities have come to belong. Preserving seeds and food knowledge, and cultivating heirloom crops contributes to Asian American community health through access to culturally relevant food, rooting down a sense of place, cultural diversity, building community and intergenerational relationships, creating networks of care, and restoring traditional modes of knowledge that would otherwise be lost.

Asian American communities already have been and are taking care of each other in distinct ways by implementing formal and informal programs and spaces on the community level. Current community organizing groups and organizations have been and are putting in the work to build intergenerational relationships and strengthen their communities through growing food and fostering food sovereignty. I will briefly list a few organizations that all highlight the

---

144 Nazarea, *Heirloom Seeds and Their Keepers.*
role of passing down seeds and intrinsically, stories that contribute to the wellbeing and health of their communities.

First, Second Generation Seeds, as mentioned previously, does rich work in maintaining and building upon seed varieties that have been passed down through generations and have become integral to cultures and their diaspora. Divesting power from large commercial interests regarding seed into the hands of farmers and local food growers, and by extension into the community that they feed and the cultures that they celebrate, ensures that foods and varieties that communities value will exist into the future. Their program Seed Stewards, an online network and a space to organize in-person events, functions as a resource for farmers, food advocates, and the general public. They hold “quarterly potlucks, cook-alongs…tools and resources to learn every aspect of growing a crop from seed sowing to seed cleaning to culturally relevant culinary preparations,” and they invite growers, chefs, storytellers, elders, and community members to gather in these spaces to deepen cultural understandings. They support and ask BIPOC farmers: what is a crop you really love and would feel heartbroken if the varieties you cared about were not available? On Seed Stewards and on their social media page, Second Generation Seeds highlight a particular heirloom crop that is significant to Asian and SWANA farmers/seed-keepers/food growers, essentially sharing and documenting how certain seeds and plants have evolved with us. For example, these growers discuss their relationship to loved crops in virtual and in-person potlucks, and provide growing knowledge: Humbleweed Farm’s Miky Eum and aehobak, Cultural Roots Nursery’s Chris Jadallah and mulukhiya/molokhia, Sariwa Farm’s Lorna Velasco and saluyot, Auntie Manna’s Chef Amanda Vong and chrysanthemum, and more. These gatherings build connections with others and to plants, stories, and food that make up the flavors and fabric of our communities.
Second, Ssi Ya Gi is a collective that amplifies elder immigrant stories in the Korean diaspora about food through actions of growing food, making distributable zines, creating gardens, and gathering events. With elders in the Asian diaspora as vulnerable members at risk for social isolation and disconnection due to cultural, generational, and linguistic barriers, by understanding and providing space for immigrant elders’ stories and memories, meaningful intergenerational connections are built. These stories, if untold and not shared, are lost to history. Ssi Ya Gi hosts events to facilitate the sharing of these stories, including a story sharing supper with Ohlone and Korean communities highlighting plants integral to their respective communities (e.g. acorns/dotori and fernbrake/gosari). This is why collecting and listening to food memories from elders contribute to community health—elders are heard and cared for, and younger generations can gain a deeper understanding of place and history.

Lastly, grassroots community organization Vietlead’s Resilient Roots Community Farm in East Camden, New Jersey is brought into conversation. Their food sovereignty and community farm program began with seeing the important role food plays in how refugees practice self-determination. Lan Dinh, the program director, discusses how the Vietnamese community continues to be uprooted (along with other working class communities) due to gentrification and development after land dispossession, violence, and genocide during the Vietnam War and the legacy of colonialism. She shares: “land has always been political and personal to Vietnamese people. Although there has been trauma from oppressive denial of land, chemical warfare, and displacement, it has also served as a source of resilience and as a political tool.”145 Having control over growing their own cultural foods, “refugees can affirm the knowledge they hold with the land” and find healing. In an interview with members of the community farm, an elder said, “We're older, and our knowledge is going to be lost. I want to

145 GridPhilly, “Access to Land Contributes to Healing and Self-Determination.”
work with the young people so they can continue the work after we’re gone.” As many children of first generation families have moved out of the city, many of the elders remain—VietLead was founded to encourage older and younger generations of the Vietnamese in Camden to address issues they faced on health, food insecurity, and more. By looking to elder immigrant gardens, building connections with youth and neighbors and facilitating intergenerational relationships created the means for cultural knowledge and history to be passed down. They grow many cultural crops, such as rau muong (water spinach): “These plants are resilient. Just like the people.”

Cultivating diasporic Asian seeds can root down a sense of place for Asian American communities and facilitate land-based healing, as well as embed people in intergenerational relationships of care. In this vein, I have developed guided questions (Appendix), hoping facilitate personal narratives of food growers in the Asian American diaspora to build intergenerational relationships and documentation that can be passed down for generations. Like Ssi Ya Gi’s oral history sessions with Korean immigrant elders that have been shared as a distributable zine, and like Second Generation Seed’s focus on monthly potlucks highlighting food growers and crops that are significant to them, these questions are a simple starting point that can guide conversations along to better understand our lineages and how food has shaped our histories. It is on the grounds of storytelling and listening to lived experiences that begin to grow spaces for learning and healing. There is a lot to learn from seeds and our elders.

---

146 Riordan, “In Camden, Cultivating Melons and Memories of Vietnam.”
147 Riordan.
Conclusion

Circling back to the original question of how community-based care is being practiced in Asian American communities, we can certainly learn from small-scale farmers and immigrant gardeners that are doing and building upon the work done to preserve and grow crops most beloved by them and their communities. These intentional practices of growing food, especially diasporic Asian food, is intrinsically linked to the health of Asian American communities and ecosystems. Cultivating the seeds and plants that ground us in our sense of home and family, as discussed in previous chapters, makes meaning of ourselves, our communities, and the spaces we inhabit. Seeds are resilient, reflecting the memories, flavors, and histories of communities. Saving and stewarding seed works towards seed sovereignty, and inherently food sovereignty, by decentralizing seed systems. Recognizing that seeds, like people, are in diaspora; nurturing seed-human relationships allow us to adapt and thrive for generations to come.148

The people and communities I have mentioned—my grandpa, my mom, Shao Shan Farm, Kamayan Farm, Farmer Mai, Second Generation Seeds, Ssiyagi, and Resilient Roots Farm—all affirm the power of seed and the rich stories that come with it. The physical act of tending the land works alongside caring for one’s own health and wellbeing; building a close relationship with the land lends time and space for healing. As Farmer Kellee Matsushita-Tseng of the National Young Farmers Coalition shares, these growing practices are about honoring and uplifting the legacies of our communities, and grounding ourselves in what it means to be in the Asian American diaspora. These practices show that communities themselves know what keeps them well and what it means to heal.

148 Shao Shan Farm.
Appendix

Guided Questions for food cultivators in the Asian American diaspora:

| Personal                                      | Where did you grow up as a child?  
|                                               | What was your favorite food as a child? Why did you like it? Who prepared it?  
|                                               | What are other kinds of foods that you commonly ate as a child?  
|                                               | What is your favorite food now? Why do you like it?  
|                                               | Where do you get most of your food now?  
|                                               | What might explain the differences in food you had as a child and the food that you eat now?  
| Regarding food cultivating                    | Why do you grow your own food?  
|                                               | Did/does your family grow their own food?  
|                                               | What is a culturally significant and/or prevalent crop that you grow?  
|                                               | Why is it significant to you? How do you use and prepare this crop?  
|                                               | Where did you learn how to use and prepare this crop?  
|                                               | Where do you get your seeds from?  
|                                               | Are there any challenges to growing this crop? Are there any barriers to growing your own crops?  
|                                               | How would you describe your current mental health/mood/emotions?  
|                                               | How does growing food make you feel?  

Bibliography


“2020 Profile of Asian Americans Age 65 and Older,” n.d.

http://farmermai.com/2022/02/09/a-glimpse-at-going-against-the-grain/.


https://plantingseedsblog.cdfa.ca.gov/wordpress/?p=21434.


https://www.instagram.com/kamayanfarm/.


https://doi.org/10.1016/j.tics.2009.06.005.

californiagrown. “Meet a Farmer: Mai Nguyen of Farmer Mai.” California Grown, June 23,


https://www.youtube.com/watch?v=CqIMhv2uHRU.


https://www.jstor.org/stable/10.1525/j.ctt7zw00q.


https://doi.org/10.18574/nyu/9781479818952.003.0019.

Instagram. “Kellee Matsushita-Tseng on Instagram: ‘Join Our July Seed Stewards Potluck (Virtual!) To Hear from @shaoshanfarm on Growing Chrysanthemum for Seed and Market: Scott Chang-Fleeman of Shao Shan Farm Will Be Discussing How to Grow He Grows Annual Leaf Chrysanthemum from Seed to Seed on His Farm in the SF Bay Area. This Presentation Will Cover Basic Growing Requirements, Market Potential and Obstacles, and the Cultural, Economic, and Agroecological Role Chrysanthemum Plays...”"
on the Farm. Visit Link in @secondgenerationseeds Bio to Join!,’’ July 29, 2022.
https://www.instagram.com/p/CglcMkJuuQH/.

http://www.kamayanfarm.com/about.


Lai, Daniel W. L., Jia Li, Xiaoting Ou, and Celia Y. P. Li. “Effectiveness of a Peer-Based
Intervention on Loneliness and Social Isolation of Older Chinese Immigrants in Canada:
A Randomized Controlled Trial.” *BMC Geriatrics* 20, no. 1 (September 21, 2020): 356.

https://leavingevidence.wordpress.com/2015/02/06/medical-industrial-complex-visual/.

Li, Jia, Ling Xu, and Iris Chi. “Challenges and Resilience Related to Aging in the United States

Maddela, Anthony. “Farm to Table Kamayan Farm-Style.” Positively Filipino | Online Magazine
for Filipinos in the Diaspora, February 23, 2022.

“Mai Nguyen, Vera F. Allen, with Host Tiffani Patton - The New School at Commonweal.”
https://tns.commonweal.org/podcasts/nguyen-allen-patton/#.ZDiYouzMJQJ.

Matsumoto, Valerie J. “Taking Root in a Harsh Land.” In *Farming the Home Place*, 17–55. A


https://www.sierraclub.org/sierra/preservation-culture-begins-seed.


https://www.youngfarmers.org/heart-and-grain/


Park, Nan Sook, Yuri Jang, and David A. Chiriboga. “Willingness to Use Mental Health Counseling and Antidepressants in Older Korean Americans: The Role of Beliefs and


Saranillio, Dean. “‘Settler Colonialism,’ in Stephanie Nohelani Teves, Andrea Smith, and
Michelle Raheja (Ed.), Native Studies Keywords.” *University of Arizona Press*, January 1, 2015.

https://www.academia.edu/12900949/_Settler_Colonialism_in_Stephanie_Nohelani_Teve_s_Andrea_Smith_and_Michelle_Raheja_ed_Native_Studies_Keywords.


https://web-s-ebscohost-com.ccl.idm.oclc.org/ehost/ebookviewer/ebook?sid=a4657c33-09d9-4682-8ebd-a6a883c24973%40redis&vid=0&format=EB.

Vegetable Growers News. “Growing Heritage and Healing through Traditional Asian


http://farmermai.com/2022/03/20/when-there-is-no-spring/.

https://doi.org/10.3390/ijerph14070824.

https://doi.org/10.1080/00049180802419104.