Research Essay
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"*Aunque No Cosechamos Mucho, Ayuda*" (Even If We Don't Harvest Much, It Helps): The Value of Agriculture in San Miguel del Valle, Oaxaca, Mexico

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Abstract: In San Miguel del Valle (San Miguel), unmechanized maize agriculture remains an important part of life for many families, even as drought and economic policies limit its viability. San Miguel is a Zapotec town of approximately 3000 inhabitants in the Central Valleys of Oaxaca, Mexico. Drawing on ten months of field work from 2017-2019, I discuss local agricultural practices and maize-based foodways. I describe the livelihood strategies of several families in San Miguel and analyze how families combine agriculture with migration and craft production. Families' decisions are shaped by the options available to them and by their personal preferences. Due to the continued value placed by many families on locally produced foods, the community maintains numerous elements of local food systems. I argue that agriculture's value in San Miguel is not determined by economic factors alone because agriculture is intimately tied with the social and cultural survival of the community. I demonstrate that understanding the social, cultural, and environmental context of small-scale farmers' livelihoods is essential for better supporting such farmers.

Keywords: maize, small-scale sgriculture, Mexico, Zapotec, local food, migration, craft production

> Yes, since the [time of our] grandparents…. those that were here before left us a piece of land and they told us, here you have land to plant. Those that already passed away, they taught us what to do. And it is nice to go to the countryside to work.
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> Because there are droughts, and it doesn't give much, [some people] no longer go out to plant. They prefer to make rugs or other things to sell to buy their maize to eat. But we are used to planting, to going to the fields. Even though it doesn't give a lot, still, even if it is only a little.
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> Farmer, San Miguel del Valle[1]

Located at the base of the *Sierra Norte* mountains, the town of San Miguel del Valle (San Miguel) sprawls along arid foothills in a corner of the Central Valleys. In the summer, fields planted with maize and other crops spread up the hills to the mountains, where dirt roads weave into high elevation forests. In the town, lives center around local festivities, craft production, the agricultural cycle, and cycles of migration. Despite the presence of numerous small stores selling soda and packaged foods, much of the local diet is still centered around traditional dishes based on maize, and women continue to prepare tortillas on open wood fires.

The basis for agriculture in San Miguel is native maize varieties, adapted to the dry local conditions, which are planted along with squash and beans – an intercropping system known as *milpa* agriculture. Few families grow enough maize to last the full year, and poor harvests due to drought are increasingly frequent as a result of climate change. Many families no longer plant at all. However, agriculture is not simply a form of economic sustenance in San Miguel. Families continue to grow their own maize because they prefer it over the maize they can buy in stores and because of the value they place on knowing exactly how their foods were produced. Maize and other milpa crops form the most prominent part of the diet and play an important role in ceremonial life and reciprocal forms of exchange. In most cases, commercial maize imported from other parts of Mexico is used interchangeably with locally produced maize. Yet residents express strong feelings about the differences between their locally produced foods and those produced elsewhere.

Figure 1. A view of San Miguel del Valle in 2019. Photo by the author.

San Miguel is a town of approximately 3000 inhabitants located one hour from the capital city of Oaxaca, Mexico. It is governed by *usos y costumbres,* a semi-autonomous form of government based on obligatory service, reciprocity, and prestige. Virtually all San Miguel residents are ethnically Zapotec and most speak Zapotec as a first language, but Spanish is taught in schools. All land is held communally, and non-mechanized milpa agriculture remains an important part of the economy. However, production is limited by droughts and lack of effective government supports. Other economic activities include craft production of hand-woven wool rugs and migration to the U.S., primarily undocumented migration of men who send back remittances.

I spent a cumulative ten months conducting fieldwork on maize agriculture in San Miguel from 2017-2019. I conducted participant observation as well as recorded interviews. After getting to know several families in San Miguel over the course of several years, through Zapotec study and involvement with local NGOs, I began a research project there in December 2017. I returned in summer 2018, January 2019, and summer/fall 2019 to conduct further ethnographic research. During all field work, I lived with a family and participated in the daily lives of several families in the community. Much of my analysis is based on unrecorded conversations with individuals with whom I built relationships of trust over the course of several years. I also conducted approximately fifteen hours of recorded interviews in 2018 and 2019. To include a diversity of perspectives, I interviewed individuals whom I did not know well, in addition to several close friends. I conducted most interviews in Spanish and some in Zapotec.

Several factors threaten San Miguel residents' ability to continue planting maize, yet many elements of local food systems are maintained. I argue that agriculture's value in San Miguel is not determined by economic factors alone because agriculture is intimately tied with social and cultural survival of the community. I base my definition of value on ideas presented in *The Construction of Value in the Ancient World.* (Papadopoulos & Urton 2012). Papadopoulos & Urton emphasize the importance of culture and context in the concept of value and describe how positive and negative evaluation occurs based on setting. I also draw on Appadurai's (1986) theory of the social lives of commodities when discussing economic value.

Maize and other milpa crops are commodities in some sense in San Miguel, but they hold a more complex value for many residents. Using San Miguel as a case study, I consider how local value systems might better inform policy related to rural food security. Understanding the social, cultural, and environmental context within which small-scale farmers make decisions about their livelihoods and diets is essential for better supporting such farmers.

Food and Diet in San Miguel

The diet in San Miguel remains centered around maize and beans. Locally produced vegetables, fruits, and foraged items are also consumed, and even families who are not agriculturally active themselves frequently purchase items from neighbors and friends. Locally raised meat is also important, particularly in meals served at *fiestas* (celebrations). However, a variety of foods are available at local stores, and the market town of Tlacolula is accessible by a short bus ride. Most families frequently purchase vegetables, some types of meat, snacks, and soda. There are also a few restaurants in the town, all opened by returned migrants, which serve pizza, tacos, and other fast-food items.

Virtually all meals are consumed with tortillas, which are eaten along with a variety of stews and other dishes. The tortillas prepared in San Miguel are large, approximately 14 inches in diameter, and are toasted slightly. This is typical for a number of towns in this part of the Oaxaca valley, and they are commonly known as *tlayudas.* Women generally make tortillas one to three times each week, depending on the size of their family. The process of making tortillas begins the night before, when the maize is cooked with limestone to remove the skins and then washed.[2] The next morning, women get up at five or six in the morning to bring the cooked maize to the *molino*, a large mechanized grinder that grinds it into *masa* (dough). Tortillas are always cooked on a *comal ((*a round, clay plate) above an open or semi-enclosed wood fire (see Figure 9), even among families who have gas stoves.

Figure 2. Cooking tortillas on a comal*. August 2019. Photo by the author*.

Before the presence of molinos, the process of making tortillas and other maize-based foods was much more labor intensive, as the dough had to be ground by hand using a *metate*, a grinding implement made of stone.

Figure 3. A metate *with partially ground maize. 2015. Photo by the author.*

San Miguel has a number of *tortillerías*, which sell machine-made tortillas produced using commercial maize flour. Families may purchase these tortillas when their own tortillas have run out or when they want softer tortillas for a certain meal. However, the practice of making fresh tortillas is conserved even among families who no longer grow their own maize. Other common maize-based foods commonly prepared and consumed are *atole, tejate*, and *tamales*. Atole is a thick, warm drink that is most commonly made with maize but is also sometimes made with wheat or rice. When made with maize, the same dough that is used for tortillas is gradually mixed with water and heated. Tejate is a cold drink, made from a dough with maize and either cacao or coconut, along with a few other ingredients. It has a foamy covering and requires an intensive preparation process. Tejate is traditionally consumed during agricultural work, a practice that remains common, but it is also frequently prepared for fiestas.

Figure 4. Preparing tejate *in the field. August 2019. Photo by the author.*

The majority of San Miguel residents are Catholic, and there is an Evangelical Christian minority. Relationships of *compadrazgo* (co-parent, or god-parent relations) are important, and young people have many different *compadres* for different events of their life. Fiestas are celebrated frequently for a variety of events in San Miguel, both religious and non-religious, and many families spend large amounts of money on these events. Food is an essential component of these celebrations; guests are fed and sent home with buckets of food to save or distribute to family members and friends.

Fiestas begin in the morning, when the compadres and their families are received by the sponsors for breakfast. Breakfast consists of atole, hot chocolate, and bread.

Figure 5. Compadres *eating breakfast on the first day of a wedding. August 2019. Photo by the author.*

Lunch is served to all guests in the mid-afternoon, a few hours after mass for religious events. One of three dishes is commonly served, each consisting of meat cooked in a sauce: mole, a sauce made with a variety of chiles and spices along with cacao; *amarillo,* a thick sauce made with maize dough along with chiles and spices; or *barbacoa,* a thin red sauce made with chiles and spices. The meat is generally chicken, pork, beef, goat, or sheep and is always locally sourced and butchered in the days leading up to the event. Tejate is sometimes served shortly before lunch. Lunch is followed by dancing and drinking, which sometimes continue late into the night. Dinner, often *salsa de chicharron* (fried pig skin cooked in sauce), is served at nine or ten.

For large fiestas, many extended family members help with cooking, cleaning, and other tasks. Women begin preparing tortillas and atole at three or four in the morning, sometimes for several days before the day of the event. In addition to feeding all guests at the sponsor's home, guests are sent home with buckets of food after each meal. Events like weddings often have hundreds of guests, and preparations begin many months in advance. To cover many associated costs, residents use a system of reciprocal exchange known as *guelaguetza*, by which other families (who may be relatives, compadres, or simply acquaintances) contribute items that the hosting family needs (often food items, such as maize, tortillas, or meat). These items are expected to be returned at a later date in the same amount, when the contributing family needs them. The system of guelaguetza was previously used primarily for agricultural work exchange and seed exchanges, but it is now most commonly used to cover items needed for fiestas.

Moving Away from the *Rancho* (ranch)[3]

> When I was a child, my parents had two *ranchos*… We would eat beans, eggs, seasonal herbs that grow in the countryside. Depending on what there was in the

> fields to eat, we didn't eat anything that wasn't from there. And well, I was a small child no? I could help take care of sheep, donkeys, bulls, and I would carry water for us to use. My mother would grind maize and wheat with the *metate* to make *atole.*
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> That's how we lived, that's how it was before. Now it is different. Why? Because we live in the town… and we no longer have everything that we produced naturally, not anymore. What we eat now comes from elsewhere. And that, well, it comes with chemicals. They put [chemicals on the crops], it isn't natural anymore like what we used to eat before.
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> Teresa,[4] January 2019

Sitting in her patio with a view towards the mountains behind San Miguel, Teresa (age 57) told me about her childhood. A few generations ago, the site where San Miguel is now located had only a few houses, and residents lived permanently on ranchos dispersed throughout San Miguel's communal lands. Teresa moved into the town when she was a child. Over her lifetime, San Miguel residents transitioned from a life centered around subsistence agriculture to participation in the cash economy.

Many older San Miguel residents identify significantly with being from the rancho where they spent their childhood. Major changes have occurred since. Locally produced foods still play an important role in families' diets, but access to different foods and increased capital to purchase nonlocal food items has drastically changed the diet and health of residents. Diets in San Miguel were previously comprised exclusively of locally produced foods – mainly maize, squash and beans, but also wheat, honey, fruits, and foraged items. Today, numerous stores in the community sell imported and processed foods. Thus, many San Miguel residents feel that the foods that they eat now are not "natural," and are full of chemicals. In addition, rains used to be more reliable. But life is now much less physically demanding, as residents emphasize even as they lament a perceived decrease in the quality of food and health.

According to my interviewees' estimates and available sources (Salas Alfaro, Vásquez, & Juárez Pérez 2014; Clements 1988), most people began moving into the town in the 1970s. Gradually, almost everyone left their ranchos to take up residence in the town. People first built houses with adobe – a departure from typical homes on *ranchos* which were made using a method of construction known as *cucharilla*.[5] Later, houses made of brick and cement displaced those made of adobe. Teresa told me what the town was like when she first moved there as a child:

> It was small. There were not many people. Everything was open, [and there were] just houses of adobe, like that one that you see on the other side, do you see? That one made of earth. Like that, but very small, and surrounded by grass. And during all of the time that it rained, everything would fill with grass. Back then we didn't have [running] water like now… we had to go carry water from the river, to get water to drink.

In contrast, today in the center of the town all roads are paved. At the entrance of the town, two- and three-story brick houses built by migrants tower above the road, many unfinished or uninhabited. The town is slowly spreading up all of the surrounding hillsides. Only a few adobe houses remain on the town's margins. Restaurants have appeared in the center of town, including a pizza shop and a few cafes. There is an Internet café in town, and families can rent Internet in their homes. Smart phones are common. The bus comes every half hour from Tlacolula, a large nearby market town. From Tlacolula constant transportation travels to the capital city, Oaxaca. Residents travel to Tlacolula and Oaxaca to go shopping, receive remittances from family members, and run errands. Residents have embraced the new resources and options available to them. At the same time, many lament the loss of self-sufficiency that has come with the town's entry into global networks.

Modern Family Economies

Below, I present a profile of three families in San Miguel with whom I spent extensive time throughout my fieldwork. All three families live in the center of town and have a similar socioeconomic status, but they pursue distinct economic strategies and incorporate agriculture into their lives to varying degrees. By presenting these narratives, I hope to provide a better picture of how agriculture fits into the livelihoods and economic strategies of families in San Miguel today. Cultural factors and the preference for locally produced foods play essential roles in families' choices about agricultural production, and these preferences vary among individuals and families in San Miguel. At the same time, structural factors shape the extent to which families can maintain agriculture as part of their livelihood.

Alejandra and Jorge

Alejandra (59) and Jorge (65) own a small store, which is well stocked with chips, soda, cheese, bread, and candy, as well as two types of maize. At the entrance to their home is a paved patio with parking space for their truck. To the left is the older part of the house, made of adobe with a thin covering of concrete. To the right is the newer part of the house that Alejandra's son built with money he made working in the U.S. Behind the house, Alejandra has a spacious yard with fruit trees and gardens filled with vegetables, herbs, and flowers. She prefers to cook with her own vegetables and fruits when possible.

During our first interview in Summer 2017, Alejandra spoke with eloquence about her family's fields and crops, as well as the impacts of migration on families in San Miguel. I became friends with Jorge and her and learned about how they maintain a lifestyle centered around agriculture. Jorge goes to the countryside every day to look after his animals and fields, occasionally with his son (age 35). They sometimes bring back other food items from the forest, such as wild mushrooms, edible wasp larvae, and herbs. In his mid 60s, Jorge usually walks to the fields even though he has a truck. Gas is expensive, and he prefers to walk. Alejandra usually stays at home to tend to the store, and she weaves rugs when she has time. When it is time to plant, weed, or harvest, she goes to the fields with their son and sometimes with one of their daughters (all three of whom are married).

Figure 6. San Miguel resident collecting wild mushrooms, Amanita caesarea*. July 2019. Photo by the author.*

Five kilometers above the town, Alejandra and Jorge plant several fields near the rancho where Jorge grew up. They also have a couple of other fields located just outside the town. They always grow maize and beans and sometimes other crops including wheat, fava beans, and peas. Jorge and Alejandra do not use chemical fertilizers on their fields. They are strongly opposed to it, although they probably do have the economic resources to purchase them. Instead, they use animal manure and compost collected from forests, and they have enough fields that they are able to rotate crops and let fields rest.

Alejandra and Jorge have a herd of about ten cattle, which they use for meat and to plow their fields. These cattle generally are left free to range in the higher elevation forests of San Miguel.

Figure 7. Cattle grazing on high elevation common use lands. July 2019. Photo by the author.

Jorge must keep track of where his cattle are grazing so that they do not wander onto the fields of other farmers in San Miguel or neighboring towns. Alejandra and Jorge also produce honey near their rancho. They are sometimes the only family in San Miguel to do so and can harvest honey just once a year due to the dry climate and limited flowering. They usually keep other animals in their yard or by their fields, including sheep, goats, and chickens.

Alejandra and Jorge continue to grow more of their own food than most families in San Miguel. This is largely due to Jorge's hard work, good health, and dedication to maintaining his fields even with unreliable rains. He has completed all of the *cargos* (required, unpaid community positions)[6] that he will complete in his life. A few years ago, he was municipal agent, the highest position in San Miguel, representing the culmination of many years of successful service to the community. But Alejandra emphasizes that even during the most demanding cargos, he continued working his fields whenever he had time. Alejandra and Jorge also have plenty of fields to plant, located in different ecological zones.

When I first met Alejandra, she did not tell me that her son and husband had both migrated to the United States in the past; she only spoke of her resistance to her son going to the U.S. now. Her son, in fact, returned last year after spending about fifteen years in the US. His earnings contributed significantly to the family's ability to open a store and buy a pickup truck. The income that Alejandra earns from the store and weaving provides a form of economic insurance when drought leads to a failed harvest. The family is able to continue producing so much of their own food only because of other income sources. Their decision to do so is the result of a strong preference for their own food. Their diet consists more heavily of their own, locally produced foods than that of most families in the community, and they sell items to other families when they have excess.

Elena and Fernando

A big red door opens into a narrow hallway that leads to a medium-sized patio in front of Elena (57) and Fernando's (60) home. The patio is dominated by a *chayote* (a green, squash-like vegetable) bush that climbs up several fruit trees and spreads across a mesh made of reed. Dozens of giant, spiny chayotes hang from the bush during much of the year, and neighbors sometimes stop by to buy enough for a family meal. Behind the chayote bush is the outdoor kitchen where a wood fire is built under a large comal to cook tortillas.

The house is one floor and made of brick. It has an indoor kitchen, a spacious altar room, and one bedroom where the family sleeps. Elena and Fernando live with their two youngest daughters, aged eighteen and fifteen. They have two other daughters and one son who live in San Miguel and are married. Their oldest son has been in the US since he was fifteen and does not plan to return.

I first met Elena in 2015, when she attended some English classes I gave with a local NGO. In summer 2018, I began spending more time with her family as she undertook the task of helping me learn Zapotec. Elena's mother Catalina, ninety-five, stopped by frequently and Elena attributed her health to how natural the foods were that she ate on her rancho.

Elena and Fernando both grew up on ranchos far up the ravine of a river that runs through the town. They spoke with me for hours about life on the rancho. Elena and Fernando continued planting fields at Fernando's rancho for many years, but for the last few years they have planted only a small amount of milpa in a different field that is located just a short walk from their home. They do not have their own cattle, so they split their harvest with a nephew who helps them plow their field. They have stopped planting their more distant fields partly because Fernando has diabetes and is no longer able to do as much demanding physical work, and partly because they do not have the time or desire to plant more.

The family has a small rug business. Fernando and their son, daughters, and son-in-law all weave rugs. They also buy rugs from several other weavers in San Miguel. Fernando dyes his own yarn, which he sometimes sells to other weavers. Elena and Fernando go several times a week to sell rugs in Teotitlán and Mitla, two nearby touristic towns. They leave early in the morning, paying a family member to drive them by truck, and walk around to different shops. This generally takes most of the day. Rugs are the only steady source of income for the family.

Though they grow only a small proportion of their own maize, Elena is adamant about consuming locally produced food, even when it is more expensive. She seeks out locally produced maize, purchasing it from farmers in San Miguel who grow excess. She purchases beans, vegetables, and foraged items from other families who are more agriculturally active, andshre frequently prepares traditional, seasonal dishes that feature items like wild mushrooms, squash flowers, and young maize. The relative success of her family's rug business facilitates her ability to make such choices, and her strong preference for locally produced food shapes her family's diet.

Figure 8. Farmers preparing squash flowers and young squash to bring back to the town for sale. August 2019. Photo by the author.

María and Alfredo

María (45) and Alfredo's (46) home has a small patio, reduced by a partly finished three-story home that their youngest son Pablo, who is working in the U.S., is building. Both Pablo and his older brother Diego are living in Santa Monica, California. María and Alfredo also have a daughter, age fifteen, who is in her first year of high school.

Pablo left for the U.S. in 2016, after attending university for a semester in a town located a few hours from San Miguel. He left the university after a semester because, as María described it, he realized that going to university was not the way to get ahead in San Miguel. He soon decided to leave for the U.S. and took out loans from family members to cover costs of the *coyote.*[7] He moved in with cousins, and began a job washing dishes two days after he arrived. By the second week, he had another job at a juice packaging plant. He worked two jobs until he had paid off the cost of his crossing, and then he began taking English classes while working one job full time, saving money to build his house.

Diego and his wife had a son shortly before Pablo left for the United States. When I arrived in Oaxaca in late 2017, I found the family busily preparing for the baptism of Diego's son, which was to take place on his second birthday. He was young to get baptized, but Diego was anxious to leave for California and wanted to be present for his son's baptism. For weeks, the family was busy sorting through maize and wheat for the many dishes to be served at the baptism celebration. Two pigs were slaughtered for the fiesta, which lasted two days. While some of the costs were covered by *14uelaguetza*, the baptism also led to debt that Diego would pay off once he was working in California. Diego left for the U.S. just a few days after the baptism.

When I first got to know María in spring 2015, she and Alfredo planted two small fields near the river every year. But it has been several years now since they have planted at all because, as María tells me, they simply do not feel like it. They prefer to purchase all of their maize, which is easier now that Pablo sends her money and Diego sends money to his wife (who continues living with María and Alfredo). They do not have a strong preference for locally produced maize and do not mind buying the maize available at local stores. They do continue to raise pigs and chickens, which are slaughtered for family events or *14uelaguetza*. And they continue to consume locally grown foods that they buy from other neighbors and relatives, including beans, vegetables, fruits, and foraged foods. The annual agricultural cycle still impacts their lives, as was evident when they had to pause construction on Pablo's house during planting time. But unlike farmers in the community, their main concern is preparing for the next family fiesta rather than when the next summer rains will arrive.

Livelihood Strategies in San Miguel

These accounts represent only a few examples of the distinct ways in which residents in San Miguel earn a living, but they show how different factors interact in determining how families organize their lives and economic activities. Agriculture is not an economically logical livelihood in San Miguel; other sources of income are required to enable families to continue producing their own food. Some families, like María's, do not place high value on producing their own foods and thus stop planting when they are able. Other families, like Elena's, have limited time but continue to plant a small amount.

Still other families, like Alejandra's, continue to practice agriculture as a primary activity but their income comes mainly from other activities. Families' diets are determined by their agricultural practices, personal preferences, and socioeconomic status. Many families continue to value and consume locally produced foods, even if they do not produce these items themselves. However, different families' preferences vary.

Appadurai (1986) and Simmel (1990) argue that exchange is the source of value for commodities. They differentiate commodity exchange, positioned within capitalism, from gift exchange. In Mexico, commercially produced maize from northern Mexico and the U.S. is sold throughout the nation as a commodity, and small-scale farmers are defined in the national production scheme by their inability to produce competitive yields on marginal fields. But even as the "customary consumption logics" of San Miguel families exist within the "larger regimes of value defined by large-scale politics" (Appadurai 1986: 3), the continued production of maize and other local crops defies commodity logic. Families in San Miguel buy much of their maize from outside sources, yet continued local production plays an essential role in families' economic strategies as well as cultural and social lives. The social and cultural characteristics of the community also shape how other economic activities are combined with agriculture, as is evident in the cases of international migration and craft production.

International Migration in San Miguel

Figure 9. An unfinished migrant's home in San Miguel, planted with milpa. 2015. Photo by the author.

As in many parts of rural Mexico, migration levels from San Miguel have increased drastically since the North American Free Trade Agreement (NAFTA) was implemented in 1994 (Wohlgemuth 2014). Economic and political changes contributed to a lack of viable income sources and the decreased ability of farmers to earn a living from agriculture. Migration has become a normal part of life for young men in San Miguel del Valle. Most San Miguel migrants travel to the Los Angeles area for periods of three to fifteen years and work in the service sector. While there are some families who migrated to the U.S., as well as small numbers of women who migrate independently, migration is mostly performed by men. Some men migrate before they get married, both to experience life in *el norte* ("the north") and often to build a home to make themselves more viable candidates for marriage. Other men migrate after they are married and often after they have children, to build a home, pay off debts, or cover education costs. Many migrants travel to the US multiple times in their life and some do not return. Migration networks are important and young men who are migrating for the first time generally travel with a coyote used by several family members already, borrow money from family members in the U.S., and have a job set up before they arrive. The costs paid to coyotes for passage to the U.S. were cited to me as between $8,500 and $10,000 USD.

Migration has caused significant changes in the community, as is evident from the multi-story brick houses that have sprung up all over the town, as well as the increased presence of vehicles owned by migrant families. Many families lament how migration separates families and how it has changed life in the town; others emphasize that migration is an important economic option for families. Migration is one of many factors that determines how and how much farmers plant, but its influence is not always constant or direct. Similarly, migration plays a role in altering dietary habits of families, as increased access to capital allows families to access new food items. However, many other factors interact in shaping local diets.

For families who do not mind consuming the maize available for sale in the community, are experiencing health problems, or simply do not like doing agricultural work, migration can serve as a source of financial security that contributes to a decision to abandon fields. Some San Miguel residents express that migration alters residents' relationships with their community and land. They consider migration to be a factor leading to decreased value placed on agriculture and local foods by younger residents, as one older, male farmer expressed:

> Those of us who are here, we do have [food] to eat. But one has to know how to work. I think if they don't want to work in the fields, that is why they leave. They want to have more money… And we, well, we make do with what we have. If there are tortillas, that's good. Even if we just eat them with salt, with a chile and that's it…

This farmer believes that those who migrate lack appreciation for the local agricultural lifestyle and are just interested in earning money.

However, in many cases, migration leads only to shifts in agricultural practices, and it can in fact support a family's ability to continue practicing agriculture. Many of the families with whom I spoke only stopped planting during the years that the male household head was gone. When he returned, they resumed planting. In other cases, if sons or other male family members were available to continue planting, or if the wife chose to continue planting herself (generally by hiring male workers), agricultural production continued even in the male family member's absence. An older, female farmer explained to me how she continues in the absence of her husband, who has been in the U.S. for five years, but she emphasized that she does plant less.

> When I plant… the bulls that plow, I pay for them. And when we do the harvest, I pay for a worker to go. Because my husband is not here. If he was here, well, he would just go…. I did plant more [when he was here] because he is the one who has to work, and now that I have to pay and sometimes people don't have time, even if one wants to plant a lot but the people just aren't available. Because they also have to work [their fields].

Increased income from migration can enable families to purchase more land, but migrants generally purchase land for construction, not for agriculture – a phenomenon that Jokisch (2002) describes as creating "a peri-urban landscape of cultivated real estate" (547). Still, migration can serve as a way to support agricultural production when poverty limits families' ability to cover costs associated with agriculture. In San Miguel, migration enables some families to purchase cattle, a truck, or chemical fertilizers and can thereby alleviate some of the financial and labor burdens that agricultural work entails.

Overall, it is clear that migration and agriculture play different, though complementary, roles in the economic strategies of most families in San Miguel. Migration covers the costs of specific projects, such as building a home or paying off debt. Agriculture, in contrast, forms part of the family's maintenance. Harvests are not guaranteed, but most families put little capital into their fields. Thus, continuing agricultural production can allow a family to decrease everyday costs by growing some of their own maize and beans, and it preserves some degree of economic independence and self-sufficiency. In addition, families may continue planting for non-economic reasons, including a preference for their own crops and simply the desire to continue working in the fields. Though migration can change such values, it often does not. Planting may be less necessary or possible when a male family member is away. But often, when he returns, planting resumes as before. As one farmer told me: "I went, I came back, and I began in the fields again. That's what others are doing too, they arrive, they buy their cattle to plow, and they begin working again."

Weaving in San Miguel

Figure 10. A loom with a rug in process in a San Miguel home. Photo by the author.

The Tlacolula Valley has a history of craft production. This is in part due to droughts that led to the need for economic alternatives to agriculture. Craft production was initially practiced in communities where agriculture was a dominant economic activity for most; artisans lacked sufficient or sufficiently productive land. Tourism, beginning in the early twentieth century, fed the growth of artisanal occupations, and in many cases craft production became an important part of not only the economy but also the community's identity (Cook 2014, 14-15). San Miguel has a long history of producing textiles, although they were not produced on such a large scale or sold outside of the community until fairly recently. When families lived on ranchos, some residents wove thick wool blankets for personal use and for sale to other community members, using wool from their own sheep. In the early 1970s (Clements 1988, 251), a few residents began to make wool rugs for sale. As residents of San Miguel moved from ranchos into the town, weaving became an increasingly important part of the economy.

The distinctive wool rugs made by San Miguel weavers are produced in two towns in the area in addition to San Miguel: Teotitlán del Valle (Teotitlán) and Santa Ana del Valle. Teotitlán is the best known of these towns and has a large and regular influx of tourists. The wool for the rugs is produced in other parts of the state and imported to Teotitlán as yarn, and the rugs are woven on a wooden loom. San Miguel weavers purchase yarn from Teotitlán. While San Miguel has made an effort to gain a reputation as a tourist destination, the number of visitors remains low and weavers sell most of their products to businesses in Teotitlán, where they are resold at much higher prices.

Some families sell rugs as their primary source of income, and all family members spend most of their time weaving. There are many other families who weave as a form of supplementary income. Some farmers weave primarily during the months of the dry season when there is little work in the fields, as one farmer described to me:

> When we finish [with agricultural work], we have to go back to working *tapetes* [making rugs]. For example, we begin in August making *tapetes*. When we are finished [planting]. August, September, October... and then in November, we go back to harvest… two months, November and December. And then in January, we begin working *tapetes* again. January, February, March, April… and then, after four months of working at the loom, we go back…. to begin to clean the land to plant again. Yes, that is how the work is [here].

Many families view weaving as a way to fill free time and earn small amounts of additional income when other options are not available. Like migration, some residents view weaving as a reason for which many young families are less engaged in agriculture; individuals may prefer to spend their time weaving to earn money to buy maize and other food items, since working in the fields is more physically strenuous and harvests are not guaranteed.

As with migration, the ways in which craft production can be combined with or replace agriculture is dependent on individual family circumstances and preferences. The lack of tourism in San Miguel has limited the potential for profit from weaving. But weaving is still an important economic option for families, and probably provides an alternative for some young people who would otherwise be migrating (Salas Alfaro, Vásquez, &

Juárez Pérez 2014, 74). It can be easily combined with agricultural production, helping farmers to cope with an inability to sell agricultural produce.

The ways in which other activities are combined with agriculture reflect the complex role of agriculture in San Miguel. Although agriculture frequently forms part of families' economic strategies, its role in family livelihoods also has significant cultural and social dimensions, which are related to the value residents place on locally produced food. The "cultural role of commodities" is intimately connected with "questions of technology, production, and trade" (Appadurai 1986), even in communities like San Miguel. Yet the ways in which agriculture fits into local economic strategies alongside activities directly tied to global economic flows represents a juxtaposition of livelihood strategies whereby San Miguel residents resist fitting in neatly to globalized and capitalist economic systems.

San Miguel in the National Context: Government Support for Agriculture
Selling maize has become unprofitable for small producers in southern Mexico due to the influx of heavily subsidized maize imported from the U.S. and other parts of Mexico. Many Oaxacan farmers continue growing maize and other crops for subsistence, but insufficient support for small-scale agriculture along with a lack of other viable income sources has left Oaxacan communities with few options to adjust to the effects of neoliberalism and globalization. In San Miguel, government support for agriculture is needed more than ever to help farmers cope with the financial risks posed by planting in their drought-stricken fields.

In July 2018, the presidential election led to the victory of Andrés Manuel López Obrador (AMLO) of the Morena party. With a campaign focused on his goal to reduce corruption, he provided some degree of hope for many poor and rural Mexicans. Most people with whom I spoke in San Miguel around the time of the election, if they were willing to share their views with me, stated their support for AMLO. Some expressed hope about the potential for policies that would benefit farmers. Others, however, were suspicious of any promises he made, expressing a lack of confidence in the government to address any of their needs. While minor changes were made to support programs in the early years of AMLO's presidency, little impact was felt by San Miguel residents. Current and past programs have failed to reach enough small-scale and subsistence farmers and have failed to complement the practices and strengths of indigenous communities.

Programa de Apoyos Directos al Campo (PROCAMPO) was created in 1994 as one of several agricultural programs designed to compensate farmers for the impacts of NAFTA. PROCAMPO's origins can be traced back to the debt crisis of 1982, which led to cancellation of agricultural subsidies as part of a series of changes towards less governmental economic intervention and greater integration in the world economy (Valentín-Garrido *et al.* 2016). PROCAMPO marked a shift from guaranteed prices, as part of an internally focused market, to direct support programs for farmers (López Sierra 2019). It was intended to be phased out by 2008 but was extended, and still exists today with some modifications (Winters & Davis 2009, 620). PROCAMPO changed its name to *Proagro Productivo* in 2014, and to *Producción para el Bienestar* in 2019. Most San Miguel residents still refer to it as PROCAMPO. For simplicity, I refer to the program as PROCAMPO throughout this section.

PROCAMPO was the first direct support program that reached small-scale farmers in Mexico; prior to NAFTA, subsidies benefited primarily large-scale and intensive grain producers in the north. But even PROCAMPO has had a strong bias towards larger, commercial northern producers. With payment amounts based on hectares under production, coverage declines significantly in the poorest rural localities where support is most needed.

In 2019, changes to PROCAMPO limited support to farmers with twenty or fewer hectares, which could help to reduce the concentration of supports in the hands of commercial producers (the limit was previously eighty hectares) (Ruíz Funes 2014). However, it requires at least a hectare of land, leaving out many subsistence producers who plant less than a hectare or plant multiple smaller plots. In addition, the registries that are used to determine eligibility for governmental programs including PROCAMPO continue to be based on satellite images and the assumption of stationary fields. These programs thus neglect and fail to support farmers practicing rotating or slash and burn agricultural practices, which support the communality of land and the ability for farmers to continue producing using little to no chemical fertilizers.

Some farmers with whom I spoke in San Miguel had received PROCAMPO, but many others told me that they did not know how to enroll – registration for such programs only occurs on certain dates, and families must travel to district centers to register. Others were working in the U.S. when enrollment was possible. For farmers who receive it, PROCAMPO can provide a small but important contribution to families' limited incomes. However, it is insufficient to increase production among small-scale and subsistence farmers, as it does not fully cover the costs of production (Valentín-Garrido *et al.* 2016). In addition, my conversations with San Miguel residents made clear that there is a lack of knowledge among farmers about how to access agricultural supports. Many of the farmers who most need the supports are thus left out. One farmer in San Miguel described feelings of abandonment by the government:

> For the government the *campesino* doesn't count… the *campesino* is forgotten. In the countryside nobody comes to assess us, [to tell us] how to plant, how to have a good harvest. None of that, they have not come.

The insecurity of harvests due to lack of rain contributes to many families' decision not to plant, or to plant less. Government support would not solve the problem of droughts in San Miguel, but it could help farmers to cope, as another farmer explained:

> There is no support and sometimes one gets desperate because it doesn't rain anymore. As for us, we do plant because sometimes we depend on it. And we hope before everything, asking God for it to rain. That is why many people are discouraged about working in the fields. I think more people would be encouraged [to work the fields if there was a support]. Why? Because if the harvest doesn't give, there is support, [at least] it helped us a little bit.

I believe that a more effective form of governmental support for small-scale and subsistence farmers could help to encourage continued production. A specific support is needed for small-scale producers, and it must work together with communal forms of organization and local land use practices. A new system of outreach and registration is also needed. While AMLO's government has made changes with the goal of more effectively supporting small-scale producers, new policies still do not meet the needs of farmers in communities like San Miguel. These policies fail to account for the distinct economic, social, and cultural systems within which agriculture is operating in such communities.

The Future for Agriculture in San Miguel

It is late September of 2019, and a tropical hurricane has resulted in one of the only heavy rains in San Miguel all summer. I have been gone for a few days, but I can tell that it has rained as the bus winds along the road to San Miguel - the hillsides have a hint of green that was not there last week.

I arrive at Elena's house and find her in her outdoor kitchen. She is making *tortillas de elote* - these tortillas are made with early maize *(elote)* and are difficult to shape as the *masa* does not stick together well. Her mother, Catalina, bought the elote in the market from a family who has a rancho at a high elevation along the road to the neighboring community of Santa Catarina Albarradas—the only part of San Miguel's land this year where the milpa is doing well. Her mother is sitting inside the kitchen. She arrived upset about an hour ago, Elena explains, because her daughter-in-law did not want to make tortillas with the elote she had acquired, and she is too blind to make tortillas on her own anymore. "Pure lazy people these days!" she had complained. Meanwhile, Fernando is in the patio weaving. Elena's two youngest daughters are also weaving in an upstairs room as they chat in Zapotec and listen to music in English.

Elena and Fernando's field near the river will not produce any maize this year. They will have to buy all of their maize. Fernando and Elena's son José planted this year on their rancho located above the town, where they have not planted in several years. The milpa did not mature, but he will probably try again next year. José's six-year-old son goes to the fields with him sometimes and gets nearly as excited when his father brings home *guajes* (a wild edible legume, *Leucaena leucocephala*) as when he brings candies from a fiesta*.* Meanwhile, Elena's fifteen-year old daughter refuses to eat many local foods. She frequently asks for money to go buy a *torta* (sandwich) rather than eating the food that Elena prepares. Elena rarely refuses, even though her mother scolds her for letting her daughter be so picky.

Although many elements of local production and subsistence practices are maintained in San Miguel, the ability of farmers to continue producing their own foods is limited. Droughts lead to many failed harvests, and residents feel that the lack of government support for small-scale agriculture discourages many from continuing to plant. The future of agriculture in San Miguel is uncertain, due to the combination of drought, lack of support for small-scale farmers in Mexico, and socioeconomic change.

At the same time, local foods remain an important part of the local diet and culture. The value that San Miguel residents place on locally-produced crops shapes local agricultural practices and foodways. As Papadopoulus & Urton (2012) emphasize, conceptions of value are highly dependent on culture and context, and valuation is an ongoing process. As I have described, local agricultural practices are maintained in San Miguel by adaptation to the modern social and economic circumstances that families face. Understanding the diverse and locally specific forms of value that agriculture holds is essential in considering policy affecting small-scale farmers. I have argued that political action is essential in order to address the threats that such farmers are currently facing. This action must take into account the distinct "commodity context" (Appadurai 1986, 15) for agriculture in communities like San Miguel, where the commodity aspect of agriculture's value is minimal in comparison to the social and cultural roles it plays. The fate of small-scale agricultural practices has vital implications for agrobiodiversity, food security, and cultural diversity.

It is difficult to imagine what San Miguel and its surrounding lands might look like in a few generations. Though some children still go regularly to the fields and forests and learn about local foods, many have little exposure to or interest in the countryside and prefer the foods available in stores to those prepared with local products. And if the reliability of rains continues to worsen, the future for San Miguel's fields may be dismal. But for now, the dirt roads and trails around the town continue to flow with farmers every day traveling to their fields even as other residents are taking the bus to Tlacolula to pick up remittances or supplies for their businesses, and milpa continues to grow all around San Miguel every summer as migrants' homes and businesses spring up and the town climbs slowly up the surrounding hills.

Figure 11. A maturing milpa. August 2019. Photo by the author.

[1] Interview by author, August 2018. All farmer quotations included in this paper were translated from Spanish and/or Zapotec by author.
[2] This process is known as nixtamalization. It is the basis for most foods produced with maize in Mexico and changes the content of maize, releasing many nutrients.
[3] The term *rancho* is used by San Miguel residents to refer to prior permanent residences located far from the present-day town, where families may still maintain fields and small buildings.
[4] In this paper, all names are pseudonyms, and I have included names only for farmers who are mentioned more than once.
[5] *Cucharilla* buildings are made of wood or stone with sloping roofs thatched from leaves of the tree *Dasylirium sp.*
[6] *Cargos* make up part of the *usos y costumbres* system. Community members (primarily men) are appointed to *cargos* and move up the ladder of *cargos* in a step-wise manner based on performance in previous *cargos.*
[7] A *coyote* is an individual hired by migrants to help them cross the U.S.-Mexico border. It is the most common colloquial term used in Mexico to refer to such individuals (Spener 2009, xiii).

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