

Planning the City of Good (and New) Neighbours: Refugees' Experiences of the Food Environment in Buffalo, New York

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The United States has resettled an average of 62,000 refugees per year over the past decade, one-quarter of whom originate from Burma. Although refugees from Burma sometimes migrate from places lacking food-related resources, their resettlement in the United States, where processed foods are abundant, may have unanticipated negative dietary and health consequences. Studies suggest that refugees decrease their intake of fruit and vegetables after living in the United States for a certain length of time, which constitutes an Americanization of diet. With little preparation for navigating Western-oriented food environments, resettled refugees from Burma may be especially susceptible to cultural and economic inequities that ultimately worsen food-related disparities.

We explore the experiences of refugees from Burma in navigating food environments in the United States, and explore the extent to which local governments are supporting or hindering their access to culturally preferred, nutritious foods. This paper presents a qualitative case study of Buffalo, New York, based on open-ended interviews with refugees originating from Burma, local government officials, and representatives from civil-society groups. The results suggest that resettlement cities may create food inequities for refugees from Burma, but that civic and social networks help refugees to adapt to their new food environments. Local government efforts are lagging in planning for and with refugee communities. We conclude with suggestions for how local governments and researchers can promote food equity for resettled residents.

Known colloquially as the city of good neighbours, the post-industrial City of Buffalo, New York is fast emerging as the city of good *and* new neighbours, as a growing number of refugees resettle in the city. A refugee is someone who 'owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality...' (UNHCR, 2013).

Refugee resettlement has received limited attention in planning literature, with even less attention to refugees' food-related experiences in their new communities. Further, urban planning professionals in the US have played a relatively minor role in refugee resettlement. This is not entirely surprising since city governments, for which urban planners often work, have limited involvement in this process. The federal government oversees the entry of refugees into the United

States. Once refugees are in the US, the federal government mandates resettlement agencies, which are typically non-profit organizations, to aid refugees in acquiring housing, enrolling in social services, registering children for school, and seeking health care. City governments and urban planners, who more directly influence the lives of residents (including refugees) in their new communities, have limited involvement in refugees' transition and engage even less in mediating their experiences of their new food environments. This is an oversight given that routine city-government policy decisions influence people's experience of their food environment (Raja *et al.*, 2008). For example, municipal decisions about whether to permit urban agriculture on public vacant land or whether a public bus route reaches an ethnic grocery store can influence the ease with which a resident can grow or purchase food in a city. Such oversight is especially burdensome for refugees who have limited economic, political, and information resources to navigate their new food environments. Drawing attention to this oversight, this paper explores the ways in which refugees from Burma (Myanmar) acquire culturally preferred and nutritious foods in the City of Buffalo, and offers guidance on how planning and policy can help to create places where refugees thrive.

Refugee Experiences in New Food Environments: A Brief Literature Review

The planning and design literature on the experiences and roles of refugees in US food systems is scant.¹ Literature from other disciplines suggests that refugees find it difficult to maintain nutritious diets in their resettlement countries. Refugees may continue to eat the basic foods that they ate in their home countries and in refugee camps (Burns, 2004). For refugees from Burma, rice would be one such food. Acculturation, however, may influence refugees' food norms. Eating norms often differ between countries, but in the case of the US in 2005, fewer than one-

quarter of Americans ate the recommended serving of fruit and vegetables (Bovell-Benjamin *et al.*, 2009). Over time, immigrants' (and refugees') food-related behaviours may mimic those of the native-born populations. One study found the amount of snacks and packaged foods consumed by refugees (Somali mothers) to be higher among those who had been living in the US for more than 4 years and who had higher English-language proficiency, two markers of acculturation (Dharod *et al.*, 2011). Such food acculturation has health implications. Scholars report that the transition from healthy, traditional diets to some Western diets is associated with increases in body mass index and increased likelihood of developing gestational diabetes (Flynn *et al.*, 2011; Ayala *et al.*, 2008; Pereira *et al.*, 2010).

Immigrants' (and refugees') transitions into new food environments are complex and are mediated, in part, by the nature of food supply in the United States. An industrialized food system with large amounts of processed, packaged foods and overbearing advertisements is unfamiliar to some refugees. Navigating new types of available food, health guidelines, and marketing can make food shopping confusing in resettlement countries (Wilson *et al.*, 2010). Studies report that some immigrants who are the first among their ethnic group to arrive often find it difficult to find culturally acceptable food and to navigate the food environment (Peterman *et al.*, 2013). Individuals living in neighbourhoods with large immigrant populations are more likely to find culturally preferred food (Pereira *et al.*, 2010). Substantial population-size aggregates demand economies of scale that enable food stores to stock and sell culturally preferred foods.

A new spatial and built environment also mediates a refugee's food experience. Resettlement neighbourhoods may be economically depressed and underserved by food retail stores. An abundance of processed and packaged food is often sold in stores in neighbourhoods with refugee populations (Wilson *et*

al., 2010). These might be sold in smaller grocery stores that are more expensive than larger markets. In addition, the ability to navigate the built environment to acquire food is constrained by unfamiliarity with a new language, fear for safety, high prices, and limited availability or knowledge of local public transportation (Patil *et al.*, 2010). Studies report that refugees from the same home countries often pool resources, such as by sharing personal transportation (*Ibid.*), which likely enables them to adapt to their new built and food environments.

Scholars emphasize that refugees face multiple economic challenges on arrival. The first few years are especially challenging, as many find resettlement countries to be quite expensive (Craig *et al.*, 2007). In one study in the US, 33 per cent of refugees reported that managing bills was the most difficult aspect of living in the United States (*Ibid.*). In Australia, refugees who had run out of, and could not afford to purchase, food during the past 12 months reported multiple challenges, including large households, medical, and medication bills; delayed Centrelink (welfare) payments; the need to send money 'home'; lack of budgeting skills; high school fees; low income; and rental bond money (Gallegos *et al.*, 2008).

In the US, federally funded public programmes such as the Supplemental Nutrition Assistance Program (SNAP); the Women's, Infants, and Children programme (WIC); Medicaid; and cash benefits are available to refugees. However, these programmes have limited efficacy as a safety net for refugees. SNAP benefits are not accepted at all food stores, particularly smaller grocery stores that often sell culturally acceptable foods. The WIC programme only allows the purchase of specific foods, such as peanut butter, which may not be familiar to refugees. Further, the programmes do not always provide a sufficient and consistent food supply. In a study of refugee women who do not work outside the home, 48 per cent were enrolled in SNAP, and 52 per cent of those enrolled

reported that they used their monthly allotment before the month's end (Craig *et al.*, 2007). In another study, 55 per cent of respondents who participated in SNAP said that their benefits lasted only 15 to 20 days (Dharod *et al.*, 2011). Local governments in the US have an opportunity to fill the gap in federal hunger-assistance programmes.

Overall, the limited literature, primarily from the public health, nutrition, and anthropology fields, reports that refugees experience multiple challenges in their new food environments. These studies largely emphasize the role of individual (refugee) behaviours and decision-making and reflect little consideration of the structures or systems within which resettled residents create new lives. The lack of literature suggests that planners and local governments are overlooking refugees, particularly in planning decisions regarding the food environment. We fill this gap by documenting how planning and policy mediate refugee experiences in new food environments in a post-industrial American city.

Research Design and Methods of Data Collection and Analysis

The empirical component of this essay is a qualitative case study of the City of Buffalo. Data for the case study come from a trans-disciplinary research project, Dealing with Disparities in Food Access Among (Burmese) Refugees (DDFAR), which is still in progress. The study focuses on refugees from Burma because they are the largest refugee group in Buffalo, and number an estimated 8,000 to 10,000 (Kim and Keovisai, 2016). The DDFAR research team appointed a Community Advisory Group (CAG), comprising five members of the refugee community and two representatives of organizations that serve the Burmese refugees from Burma in Buffalo, to guide the research. The study's research design is a mixed-methods approach which synthesizes qualitative, quantitative, and spatial data, as described below.

Interviews with Residents who are Refugees from Burma²

Because little is known about refugees' experiences in their new food environments, the researchers conducted open-ended semi-structured interviews with twenty-eight residents (see table 1). To participate in the study, residents had to have been born in Burma, received refugee status and lived in the US for over six months, and had to be at least 18 years old. A snowball sampling method was used to recruit interviewees. CAG members and research-team members (interviewers with ties to the Burmese and Karen communities) helped to recruit respondents, through word of mouth and by posting flyers at religious organizations and a college-run community education centre. Drawing on the literature, interviewers asked refugees about practices of growing, buying, transporting, cooking, and eating food in their new city. The questions aimed to reveal how refugees navigate a new food environment, the challenges they experience (if any), and how they overcome these challenges. Refugees from Burma come from diverse ethnic communities and, just within Buffalo, speak more than nine languages. The researchers developed the interview questionnaire in English; then the staff of a local resettlement agency translated it into the two languages spoken by most refugees from Burma in Buffalo: Karen and Burmese. Interviewers who are bilingual, in English and Burmese and in Karen and Burmese, conducted the interview in the respondents' preferred language: Burmese, Karen, or English. To test the interview instrument, the research team used a back-translation process to check the fidelity and cultural appropriateness of the interview questionnaire. The interviews were conducted at the respondents' preferred location, generally in their homes, and the interviewers were accompanied by an additional research-team member, who took notes and raised probing questions. The interviewers also translated and trans-

cribed the interviews into English. The Institutional Review Board (IRB) of the authors' academic institution approved all research protocols involving human subjects. The lead author read all transcripts and manually identified key themes for the manuscript.

Interviews with Local Government and Civil Society Representatives

Again, because little is known about how local governments and civil society representatives engage with refugees' food experiences, the authors conducted open-ended interviews with local government representatives (n = 7) and representatives of civil society groups (n = 6). The interview questions aimed to reveal the ways in which the local government and civil society perceive and mediate refugees' experiences. The interviewers conducted these interviews in English.

Document Analysis

The authors reviewed policy documents adopted or prepared by the City of Buffalo, to examine how formal comprehensive or strategic plans intend to respond to the needs of refugee populations, or to the opportunity afforded by their presence, in the City of Buffalo.

Secondary Data

Secondary data include demographic and economic information from the US Census Bureau. The researchers combined census data with land parcel data, using Geographic Information Systems (GIS), to identify spatial patterns in the city.

Limitations exist in this research design. The snowball sampling may have resulted in an over-representation of respondents representing a single ethnic/religious affilia-

tion (Karen), given that refugees from Burma represent multiple groups. The respondents may be disproportionately represented by those with weaker English skills, due to our recruitment at English classes and given that those with better English skills may be employed and not available to participate. In addition, because the research-team leads do not speak Burmese/Karen, there is a higher chance of information being lost in translation or interpretation. We tried to ensure the credibility of our findings by sharing a draft of this manuscript with the members of the CAG.

Study Context: Buffalo, New York

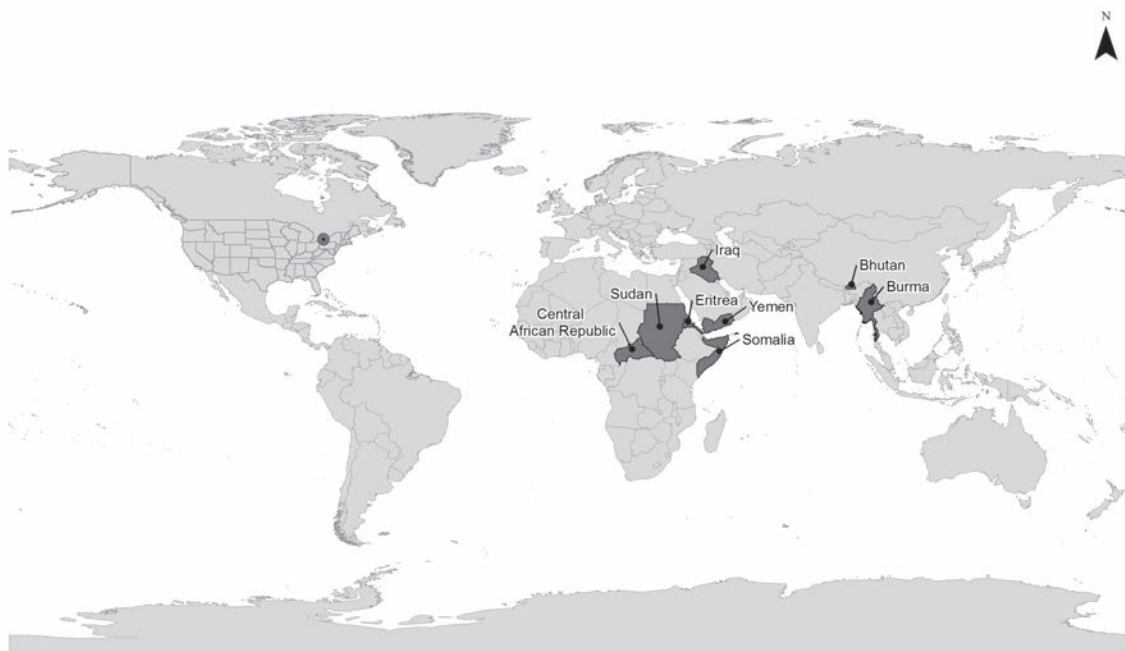
Located along the shores of Lake Erie and the US-Canada border, the City of Buffalo, in the northwestern part of New York State, has a rich industrial history. At the dawn of the twentieth century, Buffalo was home to many immigrants who travelled to work in steel and grain mills. In 1950, the city’s population was 580,132; this dwindled over the decades to just under 260,000 in 2015 (US Census Bureau, 2015a). The enormous population decline resulted, in part, from closing the steel

mills (which employed approximately 82,000 people in the early 1980s) and the opening of the St. Lawrence Seaway, rendering the Erie Canal, a key national transportation conduit connecting the Eastern seaboard with the rest of the country, obsolete (Chavez, 1982). Partly due to racial redlining, businesses and people left the city for the suburbs, empty houses became derelict, and the economy struggled. Even today, 15 per cent of the land and 16.3 per cent of houses in the city are vacant (US Census Bureau, 2015a). In 2015, 26.2 per cent of families in Buffalo were earning income below the federal poverty level (US Census Bureau, 2015a), constraining their ability to procure food. In 2015, 34.1 per cent of households in Buffalo relied on public assistance for food, through the federal Supplemental Nutrition Assistance Program (US Census Bureau, 2015b).

More recently, the City of Buffalo has begun to experience a resurgence. The population in the city has increased slightly, which may result in part from the influx of refugees. Over 10,000 refugees have been resettled in the City of Buffalo since 2001 (Brown *et al.*, 2016), when the foreign-born population began to rise (see figure 1). In fact, Erie County



Figure 1. Number of foreign-born entering Buffalo, before 1990 through 2009, US Census.



Legend

- Buffalo, NY
- Countries of Origin
- Political Boundaries



Figure 2. Origin countries of resettled refugees in Buffalo.

resettled the largest number of refugees in New York State (Bureau of Refugees and Immigrant Assistance, 2016). Most refugees in Erie County come from Bhutan, Myanmar (the official name of Burma), Iraq, Somalia, Sudan, Yemen, Central Africa, and Eritrea (Ali, 2016) (see figure 2), and tend to resettle in neighbourhoods in the western part of Buffalo (see figure 3).

As the city of good neighbours begins to receive new neighbours, many challenges persist in the food environment. Income levels vary across the city, and food retail stores have limited offerings, especially in economically depressed neighbourhoods (Raja *et al.*,

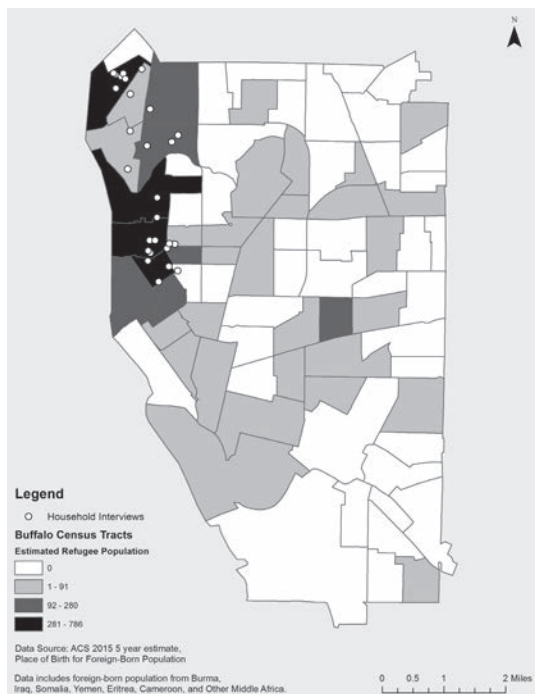


Figure 3. Estimated population of refugees in Buffalo, ACS 2015 5-year estimate, and location of interviews.

2014). As reported in the literature review, these challenges are likely to affect refugee populations, an issue we examined in the interviews.

Fortunately, the city's environment has numerous assets. The city is in close proximity to viable farmland and an adequate supply of fresh water. The region is home to many dairy farms, apple orchards, and vegetable crops (Raja *et al.*, 2014). Urban farming and gardening are becoming routine on formerly vacant land in the city. Non-profit organizations, such as PUSH Buffalo and Grassroots Gardens of Western New York (GGWNY), enable residents in the city to garden, although communicating with refugee populations can be challenging. Each organization has its own model: PUSH Buffalo owns the land on which its community gardens are located, manages the gardens, and rents out beds to community members, all on the west side of Buffalo; GGWNY currently supports ninety-nine gardens on both privately owned and city-owned land (GGWNY holds a 30-day lease with the City of Buffalo) and is actively trying to purchase city-owned land where at-risk gardens are situated. GGWNY currently does not allow gardeners to sell produce grown in community gardens. Gardening in urban settings can pose threats to food safety. As many vacant lots formerly had houses on them, soil quality is low and may be contaminated with lead because 92.99 per cent of houses in Buffalo were built before 1979, when lead paint was taken off the market (US Census Bureau, 2015a).

Given that the west side of the city borders the Niagara River and Lake Erie, fish is abundant. Published reports suggest that refugees from Burma fish for sustenance, which may have negative health consequences. For humans, the consumption of fish and shellfish represents the major pathway of exposure to mercury (Hg) and its organic and most toxic form, methylmercury (MeHg) (Liu *et al.*, 2014). Women younger than 50 and children younger than 15 years are advised to eat fish from Lake Erie only a few

times a month (Raja *et al.*, 2014), and local community organizations have engaged in extensive community-outreach strategies to alert residents of the dangers of consuming fish from local waterways.

Findings: Refugees from Burma Navigating the Food Environment in Buffalo

As noted, most refugees in Buffalo are from Burma. In our cohort of twenty-eight interviewees, six reported that they moved to Buffalo from a different (initial) city for various reasons. Most interviewees live in families, with a household size of approximately 4.07, higher than the typical Buffalo household size of 2.2. A large majority (82.14 per cent) of those interviewed were married and female, which may reflect our recruitment strategies. Reflecting trends reported in the census, most interviewees live on the western side of the city. More than half of the respondents (53.57 per cent) report living in rented homes, and at least one respondent reported having moved to Buffalo (from Burlington, VT) because of low housing prices. The interview respondents, or their family members, report working in blue-collar industries such as food service, factories, or as cleaners, and report an average annual estimated household income of \$20,362, lower than the citywide median household annual income of \$31,918 (US Census Bureau, 2015c).

Although refugees from Burma belong to multiple ethnic groups, 40 per cent of the respondents are of the Karen ethnicity (see table 1). Ethnic sub-identity is meaningful within the refugee community. At least one interviewee also reported having moved to Buffalo (from Burlington) because of the large local Karen community, affirming the importance of co-ethnic networks in the Buffalo immigrant community (Khojasteh and Raja, 2016).

Despite their limited wealth, the Burman and Karen interviewees report life in Buffalo to be enjoyable. The refugees are likely to have faced much greater struggles and trauma

Table 1. Sample Characteristics (n = 28).

Age (years)	44.79				
Annual Income*(\$)	20,362.50				
Education (%)	<i>Elementary</i>	<i>Middle School</i>	<i>High School</i>	<i>College</i>	<i>No School</i>
	42.86	7.14	25	14.29	10.7
Ethnicity (%)	<i>Karen</i>	<i>Arakanese</i>	<i>Kachin</i>	<i>Chin</i>	<i>Others</i>
	42.86	10.71	10.71	10.71	25
Gender (%)	<i>Female</i>	<i>Male</i>			
	78.57	21.43			
Home ownership (%)	<i>Renter</i>	<i>Owner</i>			
	53.57	46.43			
Household size (number of people)	4.07				
Marital status (%)	<i>Married</i>	<i>Single</i>	<i>Widowed</i>	<i>Divorced</i>	
	82.14	3.57	10.71	3.57	

Note: * Based on income of 24 (out of 28) respondents who self-reported this information.

before arriving in the US, which shapes their views of life in Buffalo. For example, one interviewee reported that when she lived in Burma, she was not able to leave her house, for fear of safety. The refugees may perceive struggles in Buffalo, such as language barriers and cultural differences, to be minimal compared to those they faced before resettlement.

Food Practices of Refugee Residents

Resettled refugees reported that they acquire, cook, and eat food that reflects traditional practices. Rice and fish, in particular, are staples. The interviewees indicated a potential divide between the preferences of older and younger populations; interviewees who tended to be older or parents claimed that younger populations prefer non-traditional food after they are exposed to such food via school lunches. The interviewees reported shopping at various locations and multiple stores for their food needs, and their shopping behaviours suggest adaptation to a new food environment. Many respondents reported shopping for traditional food routinely at co-ethnic markets, less frequently at supermarkets, and some also reported buying (meat) directly from local farmers due to dissatisfaction with the quality of meat avail-

able in supermarkets. The availability of co-ethnic retailers may reflect the larger population size of refugees from Burma in Buffalo (Peterman *et al.*, 2013).

Contrary to reports in the literature, few refugees from Burma in Buffalo reported shortages of affordable *and* culturally preferred food. None of the interviewees reported times (in the past year) when they ate smaller meals due to lack of food. They identified public-assistance programmes such as SNAP and support from other community members as reliable safety nets, if needed. The interviewees perceived food such as meat and vegetables, traditional foods that were more accessible before their move to the US, to be more expensive in Buffalo. One interviewee who shops at bulk/discount stores perceives that organic vegetables and meats are healthy for her children, but reported that they are not affordable and described food shopping as a financial balancing act.

Multiple interviewees reported growing food for sustenance, which aligns with agrarian traditions for several of them. One interviewee claimed that not having to purchase vegetables during the summer months reduced the economic burden. Gardening may also help refugees to cope with emotional challenges and past traumas. The respondents affirmed

gardening as a way to cope with feelings associated with past difficult experiences, as illustrated in the following three quotes.

...when you see the green, [it] make[s] me feel happy. (Karen resident)

[gardening does] help when cultivating... Example, when your mind is in trouble and you're unhappy, when you see your plants, it [does] help you. (Karen resident)

When we live back there [Burma] we cultivate, and when we come here, if we don't cultivate, it is uncomfortable for us. Cultivating is like living in our house, our country. It seems like that and it enjoyable for us. (Karen resident)

At least two interviewees reported foraging for food, one along a water body and the other in a park outside the city. Both reported foraging as an enjoyable activity and not one they had to rely on. However, one interviewee reported a foraging location that might pose health risks due to its proximity to a polluted waterway (Telvock, 2014).

Food-Related Challenges Reported by Refugees

Despite largely positive reports of their experiences in Buffalo, the interviewees' responses indicate several challenges that may *directly* or *indirectly* make it difficult for them to navigate the food environment. Direct factors include limited transportation infrastructure, limited language skills, limited land for growing, lack of information about food safety; indirect factors include poor-quality housing and social isolation.

The interviewees claimed that in the early days of their arrival, limited transportation was a barrier to reaching food destinations. They reported the use of carpooling for grocery shopping, within their families and with members of their larger ethnic group, as a way to overcome this challenge. Some also reported acquiring personal vehicles as soon as they were financially stable.

The interviewees consistently pointed to unfamiliarity with English as a major barrier that compounds other challenges. For example, language barriers may limit their ability to

navigate public transportation (with predominantly English signage) to reach distant stores. Such barriers may also make it challenging to navigate information *within* the stores, such as nutritional labelling on food products.

Limited information about safe food environments and practices may also pose a challenge for refugee residents – in particular fishing in polluted waters. Burmese and Karen interviewees in this study reported that they fish for enjoyment and share their catch with others in the community who eat these fish. Some said that they do not eat fish from nearby Lake Erie because they know that it is polluted. Environmental civic groups' recent efforts to inform refugee populations about safe fish consumption may have increased refugees' caution. During an interview, a leader in the refugee community also raised concerns about the small-scale preparation and (illegal) sale of potentially hazardous fish paste, an ingredient often used in traditional cooking:

They don't know! They just put it [in] with the salt and the fish. Early, many, early in the morning, you know, [they are] getting the fish from the river at three o'clock, four o'clock, five o'clock in the morning. Then, [they] put it in the basement and, you know, put it in ... [for a] couple minutes, one minute, two minute, they already ready to eat, then they [are] selling that. Other, [people from] other city, other state, they come in to buy here [fish paste] too. This is not good for [health], you know, [but] it's everything for them. This is [a] bit challenging, but, fish paste is a favourite for Burmese people.

Community Leader

The interviewees reported that refugees from Burma living in other areas of the US travel to Buffalo to purchase fish paste without fully understanding the potential risk of consuming the paste.

The interviewees also noted that they lack space where they could grow their own food. Those who were renters did not know where they could garden. Only one Karen interviewee reported that she gardens in a community garden run by a non-profit organiza-

tion. At least one interviewee who gardens reported concern about the quality of the soil.

Numerous additional factors *indirectly* affect refugees' ability to navigate the food environment. The interviewees reported challenges with securing good-quality housing owned and managed by responsible homeowners. One interviewee reported poor plumbing that creates unpleasant odours and unsanitary conditions, which may increase the risk of contamination and infection. Food preparation, cooking, and eating in such conditions is likely to expose inhabitants to health risks. The interviewees reported that homeowners were unwilling to repair the houses, and efforts to find alternative accommodation resulted in forfeiture of the rental deposit in at least one case. Housing-related expenditure affects food expenditure because the inelastic nature of housing costs often forces people to forgo or modify food expenditure.

The respondents' economic conditions are also constrained. One interviewee reported that it took several months to find a job in Buffalo, a delay that depleted all savings. There were reports of difficult working conditions, including temporary work arrangements, discriminatory practices, and harassment, all likely to make it difficult for residents to be economically stable and, therefore, food secure.

Finally, data from the interviews suggest possible social isolation among older generations of refugees. However, most interviewees reported having strong ties with others from the same ethnic group, through religious organizations, which mediates the isolation. For older residents, and any newcomers to the city, with weaker social networks, the previously mentioned challenges are harder to overcome.

Public-Policy Readiness and Response

As refugees resettle in Buffalo, the city government's readiness to serve their needs and leverage their presence has yet to fulfil its

potential. One way to examine this readiness is to judge how formal city and regional planning documents address refugees' food-related needs or articulate their role in an inclusive city. Our review of planning efforts at the city and regional levels suggests that, until recently, planning for and with refugees was not part of the process. We address each level in turn.

The city's comprehensive plan, the *Queen City Plan*, adopted in 2006, when resettlement of refugees was well under way in Buffalo, is largely silent about their presence in the city. The plan does not contain the word 'refugee' at all. The plan's sections describing vision, goals, and a subsection titled 'rebuild neighborhoods' reference the city's *immigrant*, not refugee, population. This section refers to the city's objective to revitalize neighbourhoods and in particular references newcomers to Buffalo and the United States:

Dramatically improve the welcoming of immigrants to Buffalo, and in the process breathe new life into our city. Collaborate with local resettlement agencies that bring diverse newcomers to the Buffalo area to provide immigrants with housing, education, social, and employment services. We need to strategically improve how these people are served and expand this inflow, as other cities like Utica, Minneapolis, and Cleveland have done. (City of Buffalo Office of Strategic Planning, 2006, p. 87)

It is unclear whether the plan purposely uses the terms 'immigrants' and 'refugees' interchangeably. Not surprisingly, no language about refugees and food access is included. However, the adoption of the comprehensive plan laid the groundwork for the development and adoption of a new land-use plan and zoning bylaws, or a unified development ordinance (UDO) (City of Buffalo, 2017). The UDO, adopted in 2017, is the first major overhaul of city zoning bylaws since 1953. Within the new land-use plan, community gardening is mentioned three times as a viable solution for vacant land (City of Buffalo, 2016). In the new UDO, market gardens defined as 'a site where food, ornamental crops, or trees are grown for sale to the

general public' are allowed in multiple zones (City of Buffalo, 2017, pp. 6–18). The UDO, in theory, clears the way for sale of food grown in market gardens in the city, which could economically benefit the Burman and Karen populations. Yet, neither the adoption of the new land-use plan nor the UDO have brought any clarity or security to the short 30-day lease arrangement between the city government and GGWNY for use of vacant public land for community gardens.

Refugees from Burma began resettling in Buffalo in the early 2000s; since then, a 17-year period in which a new citywide comprehensive plan, land-use plan, and zoning ordinance were adopted in Buffalo, support for refugee health has barely surfaced in the planning documents. Although citywide planning documents are shortsighted, the local government has begun to recognize the arrival of refugees in the city. Signalling their support for the refugee population, the City of Buffalo established the Office of New Americans (ONA) in 2015. In 2016, the ONA, which is part of the city's law department, published the *New Americans Study*, a 20-page document that outlines twenty-seven strategic actions in four areas: (i) 'Welcoming', or 'improving initial experiences of immigrants and refugees'; (ii) 'Settling In', or helping with provision of housing, neighbourhoods, and public safety; (iii) 'Strengthening' of provision of 'social services, healthcare, education, and employment' to help new Americans prosper; and (iv) 'Moving forward', or helping facilitating their integration in the city, provide improved access to city services, and develop initiatives where the city is uniquely positioned to make a difference (Brown *et al.*, 2016, p. 5).

The word 'food' shows up four times in the document: twice in the preamble and twice in the strategic actions. The plan notes in the preamble that on arrival, refugees receive 'food typical of the refugee's culture' from the local resettlement agency, and that the US Department of State provides a stipend (disbursed through the resettlement agency) for three months for expenses which include

food (and rent, etc.) (*Ibid.*, p. 2). Yet, the twenty-seven action strategies that follow the preamble barely address the food-related needs of refugees, with only two appearances of the word 'food'. Action 5, to encourage community engagement, seeks to facilitate interaction between city residents and refugees and immigrants, and suggests enactment of celebratory days during which 'students are able to share their unique cultures through ... food' (*Ibid.*, p. 8). Action 8, to ensure adequate housing, aims to ensure that new Americans are able to enter the housing market. The reference to food in this action focuses on educating new Americans 'on issues such as food storage' (*Ibid.*, p. 9), which may relate to food safety. Overall, the plan does not address refugees' ability to navigate the food environment, and when it is mentioned the focus is on short-term needs (provision of culturally preferred food for refugees upon arrival) and on refugees' instrumental role in promoting cultural diversity. Despite the plan's limitations, the ONA continually works in partnership with civic agencies to improve services for new Americans. For example, addressing the key challenge of language barriers, the ONA and a faith-based group have implemented a multilingual hotline for new Americans that provides information and referrals in 200 different languages.

On a broader regional scale, a sustainability plan for the Buffalo-Niagara region (which includes the City of Buffalo) called *One Region Forward* was completed in 2015, when the city's immigrant and refugee populations began to burgeon (University of Buffalo Regional Institute, 2014). Led by the region's transportation authority, the planning process involved multiple sectors and levels of government. For the first time in the city and region's formal planning history, the regional plan addressed food systems as one of its five focus areas (the others were land use, transportation, housing, and climate change). The plan's strategy for food systems, titled *Growing Together*, includes multiple refer-

ences to the region's refugee population. For example, the report draws attention to the dangers to refugees of fishing from contaminated waters, the need to connect ethnic retailers with local farmers, and the need to connect refugee populations with agricultural opportunities (Raja *et al.*, 2014). Although refugees' concerns are noted, the document lacks nuance and documentation of refugees' experiences in their new food environment.

In summary, the planning efforts at both the city and regional levels fall short of recognizing the food-related needs of refugees and the opportunities afforded by their presence in the city. This insufficiency may result, in part, from local government officials' limited capacity and training to understand the refugee population's experiences, which in the United States are relegated as a concern of the federal government and non-profit civic agencies. Indeed, during interviews, city agency representatives acknowledged a lack of awareness of refugees from Burma's general and food-related challenges. Interview data suggest that agencies and individuals charged with planning neighbourhoods are not deeply engaged in planning for and with refugees. Instead, planning staff and representatives of elected officials pointed to the ONA or civic resettlement agencies as responsible for the refugee community's wellbeing. Repeatedly, local government officials mentioned benefits that refugee populations bring to Buffalo, but rarely the challenges that refugees face and the ways in which local government planning should support them.

Recommendations for Planners and Researchers

The planning literature on how best to plan cities for new Americans – especially with an eye towards their food experience, not solely food security – is limited. Planners and researchers can support refugees *and* the food system by providing access to infrastructure (land), amplifying the voices of refugees in planning processes, and promoting civic-

public and cross-sectoral collaboration, as noted below.

Ensure Access to Land for Refugees

In post-industrial cities, food production is viewed as a strategy for the greening of neighbourhoods. Refugees, many of whom have agrarian backgrounds, can play a crucial role in urban greening. Growing food can help refugees improve their food security, increase access to fruit and vegetables (Alaimo *et al.*, 2008), and cope with past traumatic experiences. The productive use of city-owned land for community gardens can benefit refugee populations and bring neighbourhood residents together to alleviate social exclusion. If traditional fruits and vegetables can be grown in the climate of the resettlement city, this may ensure that residents continue eating some elements of their traditional diet. Growing food can also alleviate some of the economic strains of purchasing more healthy food (Craig *et al.*, 2007). Access to land for refugees, many of whom are renters, is an essential requirement to growing food. Secure tenure of community gardens on public lands, such as long-term leases or land trusts, is important for ensuring land access.

Promote Civic-Public, Cross-Sectoral Collaboration with the Refugee Community

Local governments lack experience working with refugee communities. To plan a city for and with refugees, local governments and planners must work with the refugee residents, civil society groups, and resettlement agencies that directly experience and/or understand the opportunities and challenges afforded by the presence of refugee communities. Although civil-society groups have positive impacts on refugee efforts, they do not have the bandwidth to serve tens of thousands of people on an ongoing basis or address broader structural problems (e.g. poor public transportation, quality of food retail, land access available in neighbour-

hoods) (Wilson *et al.*, 2010). Local governments can enact policies and reduce structural barriers to help refugees thrive, and amplify the work of civic agencies.

Include Diverse Voices in Leadership Positions in Local Government

Diverse local government leadership is more likely to result in the creation and implementation of culturally inclusive policies. A commitment to hiring diverse populations, including those who arrived in the United States as refugees, for government positions will ensure that refugees' voices are included in policy-making.

Local governments and planners must also be mindful of the heterogeneity in histories, challenges, ethnicities, and experiences *within* refugee populations. Even if refugees are from the same country, they may have very different experiences, religious beliefs, languages, and needs. Burma itself includes over 100 different ethnicities. Different ethnic groups may not be able to represent or advocate for all people from a single country of origin and may have varied power within the broader community. To create inclusive planning processes, local governments must understand the heterogeneity of power structures within refugee communities.

Conclusion

Refugees have made a home in Buffalo, adapting to and changing the food landscape in this post-industrial city. Refugees value Buffalo in large part because of the support systems established by co-ethnic civic organizations and community leaders. Local governments, while welcoming refugee populations, largely overlook them in routine planning processes. In Buffalo, the implementation of the Office of New Americans is a step in the right direction, but the opportunities and challenges afforded by the presence of refugee populations concern *all* local government agencies, from planning to public works.

In post-industrial cities that have witnessed population decline, an influx of refugees can be the catalyst for revitalization. However, for long-term success, local government planners must understand and consider how new neighbours can thrive alongside those who came before them.

NOTES

1. A search of the peer-reviewed literature published between January 2000 and March 2016, with the words 'refugee', 'food', 'resettled refugees', and 'food environment' as keywords, in library databases that archive planning, public health, and nutrition journals, returned forty-six articles. Of these, only fourteen were relevant to this paper. Most articles focused on food insecurity among refugee populations and/or were published in public health or nutrition journals. A supplementary search of two key US-based planning journals, *Journal of the American Planning Association (JAPA)* and *Journal of Planning Education and Research (JPER)*, with the keyword 'refugee' (in the body of the paper) returned twenty-seven articles: seventeen in *JPER* and ten in *JAPA*. Very few of these twenty-seven articles actually examined the refugee population.

2. Note that residents who arrive in a country as refugees have multiple identities and may, over time, choose not to be identified as refugees.

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