



# ‘Whatever we have is what we eat’: How marginalised urban populations in the Philippines and Thailand experienced their food environments, food security and diets through COVID-19

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## ABSTRACT

This qualitative cross-country comparative study investigated the lived experience of marginalised urban populations (unemployed, daily wage earners/street vendors, and internal/external migrants) in Manila (Philippines) and Bangkok (Thailand) on food environments, food security and diets during COVID-19. Semi-structured interviews were conducted with individuals ( $n = 59$ ) in April–May 2022. Thematic analysis revealed loss of income and strict mobility restrictions (Philippines) as key drivers of dietary changes and hunger. Common narratives included financial hardship, loss of personal agency, and daily survival. Coping strategies included drawing on social networks, cash and food aid, and ‘scheming’ around restrictions. Contextualised crisis policy planning should explicitly consider the lived experience of marginalised populations for future shocks.

## 1. Introduction

Unhealthy diets lacking in nutrient-dense foods such as fruits and vegetables are among the major drivers of illness and death globally, underpinning 11 million deaths each year (Afshin et al., 2019). Globally, healthy diets consisting of diverse foods are inaccessible for 3 billion people (Herforth et al., 2020). Shocks such as the COVID-19 pandemic exacerbate these food system inequities (Savary et al., 2020). Early pandemic research demonstrated that containment measures disrupted food supplies, whilst mobility restrictions and the sharpest increase in worldwide poverty in 20-years (Egger et al., 2021; WorldBank, 2021 Updated estimates of the, 2021), accompanied by uneven economic recovery (FAO/IFAD/UNICEF/WFP/WHO, 2023), impaired physical and financial access to a healthy diet (O Meara et al., 2022; Picchioni et al., 2022), especially for the most marginalised within society, including the urban poor (Kimani-Murage et al., 2022; Pongutta et al., 2021). The intensification of conflict, climate extremes and economic shocks on food systems, combined with growing inequalities, is

perpetuating, and deepening the food insecurity of vulnerable and marginalised groups (FAO/IFAD/UNICEF/WFP/WHO, 2023; Nisbett et al., 2022; HLPE, 2023).

The shock of the COVID-19 pandemic highlighted food system resilience and fragilities (Savary et al., 2020; Reardon et al., 2020; Tamru et al., 2020; Devereux et al., 2020). While acute global shocks do not distinguish between rich and poor, the diets of the most marginalised in society will be most adversely affected and the least able to adapt (Nisbett et al., 2022; Sequist, 2020; Grannell et al., 2020). In the short term, households with precarious incomes and uncertain access to food responded to COVID-19 containment measures (e.g., ‘lockdowns’) with different coping strategies (HLPE, 2020). Reduction in dietary quality (even while maintaining sufficient calories) was seen in some cases, with households protecting staple food consumption over the intake of nutrient-dense, albeit often more expensive, foods (Pongutta et al., 2021; Darnton-Hill and Cogill, 2010J). Impacts fall differently in urban populations in low- and middle-income countries, who purchase a majority of their food and often have fewer links to production- or

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foraging-related coping strategies than rural communities (Moragues-Faus and Battersby, 2021). These findings mirror experiences from prior systems-level shocks. For example, in Indonesia, the consumption of eggs fell by over 50% during the economic crisis of the late 1990s, whilst consumption of green leafy vegetables fell by up to 30% (Dobhal and Raghuvanshi, 2012), limiting dietary quality. Before COVID-19, diets were not optimal in the Association of Southeast Asian Nations region with only 27% of countries in this region reaching the World Health Organization's recommended vegetable intake per person (Kalmpourtzidou et al., 2020). Despite strong food cultures in many South-East Asian countries (Soon, 2014), nutrition profiles are moving towards a double burden of undernutrition and overweight/obesity, particularly in urban areas (Rachmi and Baur, 2018; Harris et al., 2020). Food environments have become a focal point in efforts to address these challenges and improve consumer access to healthy diets, because they are a key interface where people acquire and consume foods within the wider food system (HLPE, 2023; Turner et al., 2018).

Recent calls have highlighted the importance of voicing contextualised lived experiences of food environments as a critical source of evidence for the co-design of effective policies and interventions (Spire et al., 2023). Whilst lived experience approaches are gaining prominence within food environment research (Neve et al., 2021), and there is a modest evidence base emerging for popular methods such as participatory photography (Turner et al., 2023), empirical findings on the lived experiences of food environments during the COVID-19 pandemic remain limited. To our knowledge, only four qualitative studies have been published on the lived experience of the COVID-19 pandemic on food acquisition and dietary intake in low- and middle-income countries (O'Meara et al., 2022; Kimani-Murage et al., 2022; Pongutta et al., 2021; Emiliata et al., 2020). The largest study captured the diverse perspectives of respondents from 119 countries during the second month (March 2020) of the COVID-19 pandemic; however, it collected responses via an online survey, biasing results towards literate, better-off individuals (O'Meara et al., 2022). Conversely, two of the studies were conducted face-to-face with low socioeconomic groups in Nairobi urban slums of Kenya, Africa (Kimani-Murage et al., 2022), and from rural households in Samoa, the Pacific Islands (Emiliata et al., 2020). To date, only one mixed-method study was conducted with marginalised groups in South East Asia (Pongutta et al., 2021): This investigated the social impact of the COVID-19 pandemic on urban slums and the response of civil society organisations in Bangkok, Thailand, highlighting how social exclusion prevented residents from accessing social protection, leading to financial constraints that resulted in food rationing and reliance on donated food (Pongutta et al., 2021). Given the high rates of migration to urban centres in the Association of Southeast Asian Nations, it is important to understand the effect of shocks on food environments in densely populated urban centres where livelihoods are predominately precarious and food security and dietary quality is likely to be severely impacted, exacerbating health inequalities. Investigating people's lived experience of their food environments, food security and dietary intake during the pandemic may improve understanding of the differentiated impacts of COVID-19 containment measures on food acquisition and consumption for marginalised groups. Findings will help policymakers and other food system actors understand how policies, programs and actions affect different populations, and how they might improve the effectiveness and equity of those initiatives designed to support healthy diets (Neve et al., 2021), particularly among marginalised groups during times of crises.

In this study, we investigate the lived experience of food environments, food security and dietary intake among some of the most marginalised urban populations (e.g., unemployed, daily wage earners/street vendors, and internal/external migrants) in Bangkok, Thailand, and Manila, the Philippines. Our study seeks to address the following questions: 1) what were the drivers of food acquisition and consumption during the COVID-19 pandemic, and why; and 2) how did people acquire, prepare, distribute, and consume the food they ate, and how did

this change over this time?

## 2. Methods

### 2.1. Study design

This study was the third part of a three-part research project aiming to understand change in the policy, economic and social aspects of food environments, food security and diets during the COVID-19 pandemic in South-East Asia. The study employed a cross-country comparative, qualitative study design based on social equity theory (Nisbett et al., 2022). For food and nutrition, social equity theory suggests that the social distribution of malnutrition or poor dietary quality is shaped by people's experiences of inequality, driven by social stratification (people's social position in terms of identity based on attributes such as gender, ethnicity, and age; and people's capital and potential based on their education, livelihood, wealth, and social networks), and underpinned by the norms and ideas held by different social and political actors in a given society, which crystallise into institutions, governance and policy that systematically disadvantage certain social groups in certain contexts (Nisbett et al., 2022).

### 2.2. Setting

Countries in the Association of Southeast Asian Nations region was affected differently by the COVID-19 pandemic, and diverse policy responses were implemented to mitigate viral spread and support livelihoods (Djalante et al., 2020). For this study, Thailand and the Philippines were selected as two contrasting case study countries with different infection rates, death rates and mitigation policies (as of late 2020) (Hale et al., 2021).

Both countries had prior experience addressing pandemics, namely the 2002-4 severe acute respiratory syndrome (SARS) outbreak. Although both countries were only mildly affected by SARS infections (Paris, 2020), the governments issued relatively strong policy orders covering psychological, social, economic, civil, and military defence (Caballero-Anthony, 2005). This experience paved the way for COVID-19 pandemic policy. Notably, over the duration of the COVID-19 pandemic, the Philippines enforced more stringent mobility restrictions compared with Thailand between January 2020 and January 2022 (Fig. 1). Over the course of the COVID-19 pandemic, unemployment rose by 8 million in the Philippines and half a million in Thailand, but there were also millions of employed workers who were unable to work due to mobility restrictions (Secretariat, 2020). This, along with earlier experience with SARS, suggested the need to protect not only lives but livelihoods during major disruptions. Under the Bayanihan Acts, the Philippines government provided periodic cash transfers at a set rate per household (regardless of household size) and direct food aid; while the Thai government implemented a range of measures such as low-interest loans and debt restructuring, small cash transfers to affected populations, and unemployment compensation for those insured through the Social Security System (Secretariat, 2020).

### 2.3. Sampling

We purposively selected urban (high-density housing) and peri-urban (lower-density housing, possibility for limited food production) areas in each of the capital cities to compare the lived experiences of marginalised communities in different residential settings. In Bangkok, Thailand, the urban slums of Bonkai and Yommaraj railway community, and one densely populated non-slum community (Soi Sassana) were selected, along with the peri-urban areas of Phuttamonthon and Lard Krabang districts. In the Philippines, two barangays (villages) of Calocan, the third most populated city in Metro Manila were selected, with Barangay 157 the most densely populated compared with peri-urban Barangay 113.

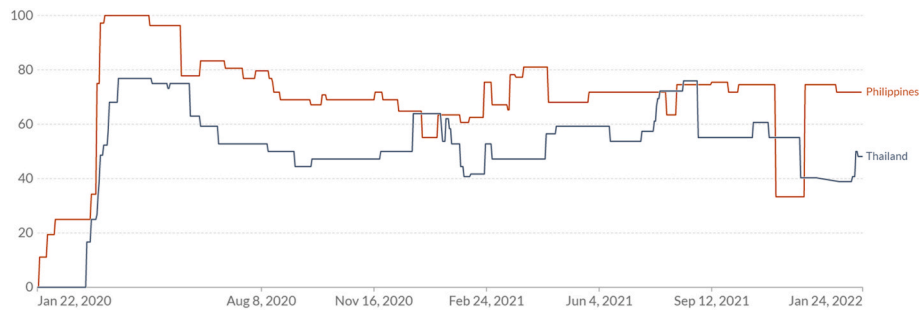


Fig. 1. Severity of COVID-19 pandemic-related responses in Thailand and the Philippines between 2020 and 2022.

Source: Hale et al., 2021 (Hale et al., 2021). A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). <https://www.bsg.ox.ac.uk/research/research-projects/oxford-covid-19-government-response-tracker>

The purposive selection of study participants ( $n = 59$ ) was guided by understandings of equity and marginalization (Nisbett et al., 2022). These concepts were operationalised in each context through a localised understanding of how marginalization plays out in each place. For instance, we know that daily wage earners and the unemployed are more vulnerable to food security disruptions in general; and that specific groups can be marginalised in specific contexts, such as Burmese economic migrants in Bangkok. Sampling drew on these *a priori* characteristics, and the sampling strategy aimed to interview a range of people with a range of attributes known to be marginalised in each country. In both countries these included daily wage earners, street vendors and the unemployed; migrants from inside and outside of the country; a range of ages and genders; and because nutrition was a focus, we also sampled some mothers of young children to understand their specific experiences. Some participants had multiple intersectional characteristics that might lead to marginalization, for example the parent of a young child may also be a woman, a daily wage earner, and an internal migrant, so the categories of attributes are not mutually exclusive.

In practice, respondents were purposively selected according to these understandings of marginalization. The researchers in each country contacted authorities such as community leaders and volunteers in the selected geographic areas to identify respondents fitting the criteria, then of these respondents were randomly selected. Respondents were then asked to help identify other persons in their community for interviews (a snowball approach), and researchers ensured that a range of people with different equity characteristics were sampled in the end. Most interviews were conducted at the respondents' residence, however some street vendors were interviewed at their workplace. The final selection of respondents for the Philippines ( $n = 29$ ) and Thailand ( $n = 30$ ) and the intersecting characteristics of marginalization based on geography and socio-demographic characteristics is visually depicted in Fig. 2.

2.4. Data collection

In-depth semi-structured interviews were used to elicit the lived

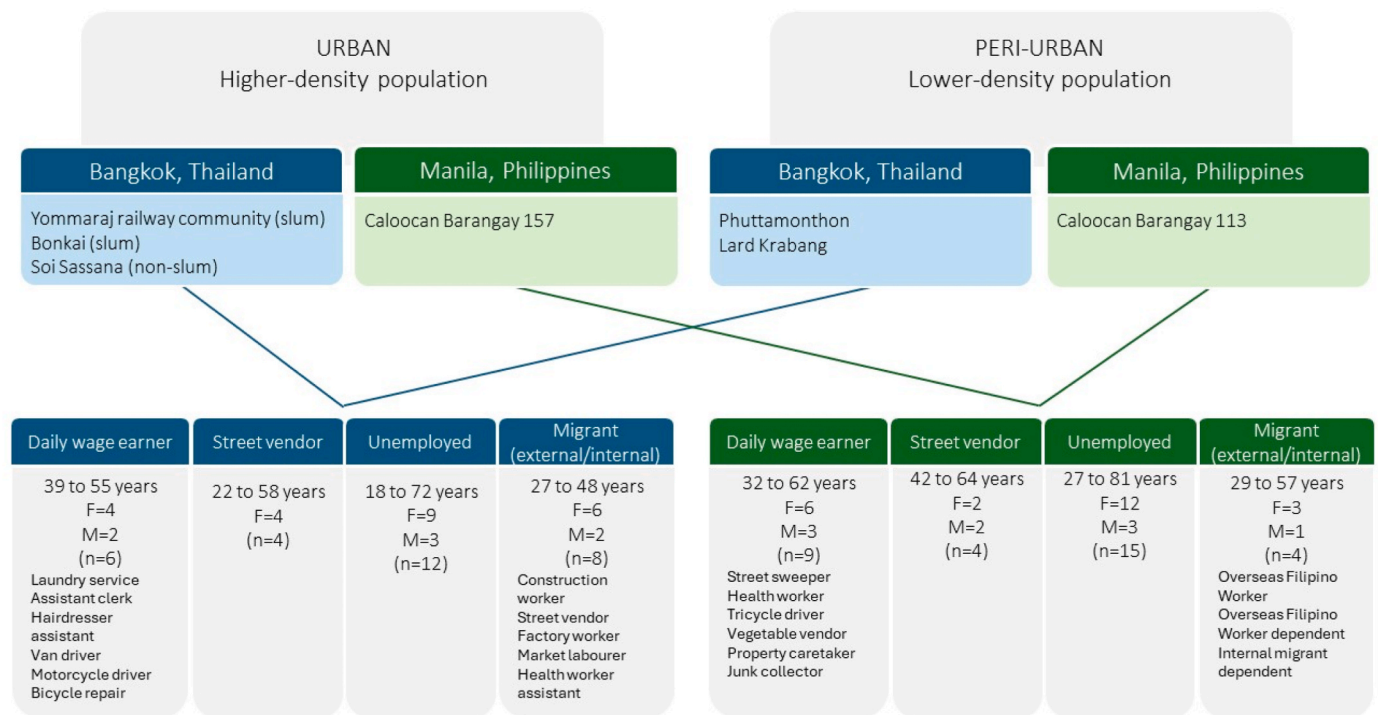


Fig. 2. Final respondent sample ( $n = 59$ ) for the Philippines ( $n = 29$ ) and Thailand ( $n = 30$ ) demonstrating aspects of marginalization specific to each country based on level of urban population density and socio-demographic characteristics. Some respondents had intersecting characteristics exacerbating vulnerability; for example, an internal migrant might also be a mother of a child under 1 year old that is also a daily wage earner. Due to these intersecting characteristics, sampling sub-groups will not sum to the total number of interviews for each country. F = female; M = male.

experiences of marginalised groups during the pandemic. Interviews were undertaken by two study authors based in (and originally from) each country (CS and PI), in local languages, between April and May 2022 and took around 60 min. Participants were asked to reflect on their lived experiences of their food environments, food security and dietary intake during the pandemic from the beginning (January/February 2020) to the current day. Interview guides were structured around a synthesis of foci from the drivers of food choice literature, with questions addressing the 'what, how and why' of food choices (Blake et al., 2021) in relation to key dimensions of the food environment (Turner et al., 2018). Interview guides (developed in English) were then piloted and minor adaptations made based on local context and clarity of translation into local languages (**Supplementary Information**). Interviews were undertaken in local languages, recorded, transcribed, and translated into English by researchers fluent in both languages.

## 2.5. Data analysis

Thematic analysis of respondent transcripts ( $n = 59$ ) was conducted using Qirkos 2.5.2 software (Fair Oaks Labs, Inc). Inductive and deductive coding was undertaken by one independent researcher using a six-step systematic approach (Braun and Clarke, 2006). The researcher familiarised themselves with the transcripts before coding emergent sub-themes. Sub-themes were identified from patterns of meanings present across multiple cases and were informed by the theoretical concepts of structure and agency (Giddens, 1984; Clapp et al., 2022). Initial sub-themes were framed within the context of the existing COVID-19 literature (O Meara et al., 2022; Kimani-Murage et al., 2022; Pongutta et al., 2021; Emiliata et al., 2020). The researcher refined the coding with the research team in an iterative process, including those involved in data collection with experience in the Philippines and Thailand (Braun and Clarke, 2006; Green and Thorogood, 2018). The 'queries' function within Qirkos was used to conduct sub-set analysis for the purpose of identifying differences and similarities in results based on socio-demographic characteristics, including country of residence, formalisation of employment, degree of urbanisation, migration status, and age. Mind-mapping techniques aided interpretation. Any lack of clarity in results were discussed and resolved with the wider team to maximise reliability (Green and Thorogood, 2018). During this process, a series of cross-cutting themes embedded throughout respondents' responses were identified and used herein to present the results. Representative quotes were selected and agreed on by the team.

## 2.6. Ethics

This study was approved by the World Vegetable Centre institutional review board; the Philippine Social Science Council Ethics Review Board (CF-21-11); and the Research Ethics Committee of the Institute for Population and Social Research at Mahidol University, Thailand (2022/04–076). The informed consent form was translated into local language and was read to the respondents prior to the interview. Respondents provided verbal consent before the interview began and they were advised that they could end the interview or decline to answer questions at any time.

## 3. Results

Thematic analysis identified four overarching themes and fifteen sub-themes (Table 1). The results are presented as per the research questions with a strong focus on the why and how of food acquisition and consumption during COVID-19. The first two themes (i) financial hardship and (ii) loss of personal agency and food choice speaks to research question 1 – what were the drivers of food acquisition and consumption during the COVID-19 pandemic, and why (section 3.1)? While the last two themes (iii) daily survival and (iv) social support answer research question 2 – how did people acquire, prepare,

**Table 1**

Summary of key themes and sub-themes identified from participant transcripts.

Themes ( $n = 4$ )	Sub-themes ( $n = 15$ )
<i>Research question 1: What were the drivers of food acquisition and consumption during the COVID-19 pandemic, and why?</i>	
Financial hardship	Precarious livelihoods and loss of income Financial stress and trade-offs Change over time
Loss of personal agency and food choice	Lockdown mobility restrictions limited physical access to food Limited ability to use motorised transport Reliance on food aid Food substitutions and long shelf-life foods
<i>Research question 2: How did people acquire, prepare, distribute, and consume the food they ate, and how did this change over this time?</i>	
Daily survival	Rationing food Self-reliance and 'scheming' Shopping frequency and food delivery Home cooking and ready-made-meals
Social support	Government assistance Community food sharing Family financial support Social network food acquisition

distribute, and consume the food they ate, and how did this change over this time (section 3.2)? The last section summarises the results and provides a cross-country comparison.

### 3.1. What were the drivers of food acquisition and consumption during the COVID-19 pandemic, and why?

#### 3.1.1. Financial hardship

In both countries and across all sub-groups, affordability was the most cited barrier to acquiring food. Most respondents described being reliant on precarious livelihoods that made them financially vulnerable to pandemic-related mitigation strategies (Box 1). The daily wage earners' subsequent loss of income due to inability to travel for work, and business closures, was described as the main source of financial strain on food budgets. This was exacerbated by unpaid sick leave and caring responsibilities, especially for women. In both countries, those on salaries, elderly pensions, or overseas remittances were reportedly more financially secure.

"It was much better than this. Before COVID-19, my husband could earn 1,000 baht per day but nowadays, it is only 300–400 baht per day. It is worse now."

**Thailand #54, Female, 44yr, Street Vendor/Young parent, Peri-urban**

In both countries, most respondents described feeling financially constrained, experiencing a loss of income at the same time as food and commodity prices increased. Many respondents described juggling the trade-offs of multiple financial stresses, including rent, healthcare, utilities, education, transport, debt repayment, and food. The subsequent strain between food budgets and other living expenses was described as the main driver behind dietary changes. "Hardship", "enduring" and "suffering" were common words used to describe the financial situation experienced by respondents, especially in the Philippines, and in households with multiple dependents (Box 1). In the Philippines, some respondents, especially women, described a driving need to save money for fear they would be held in quarantine without enough money to feed their children.

"If you can find a way, really act. Because you can't just rely on help. You will go hungry. You will really need to act. That's what I do, scavenge. Take trash from people, from neighbours. Then I earn money in the barangay as a street sweeper. I only get paid 1,000 there. I started with 600 but I persevered."

**Philippines #11, Female, 52yr, Daily Wage Earner, Densely urban**



**Box 1**

Lived experience case studies for each country.

**62-year-old woman, unemployed/homeless, urban densely populated.****Manila, The Philippines.**

Prior to the Covid-19 pandemic, informal settlers lived on the banketa (sidewalk) along the main road outside the Temple in Caloocan City until their shanties were demolished. Since then, informal settlers were forced to rent apartments, which took up much of their daily wages. When the pandemic started, it made it even more difficult for them to cope with rental payment and expenses for food.

One Filipino woman (62-years-old) opted to maintain her space along the sidewalk instead of renting living quarters. She collects trash and scraps for cash. While the hard lockdowns were in effect in 2020, she lived on the sidewalk while her family lived in a house in Barangay Bagong Silang in Caloocan City.

The woman reported that she felt she was better off living along the sidewalk during the pandemic. She was able to collect almost a sack full of canned sardines from passers-by who distributed food packs to people in need. She received bottled water, cooked food, and rice, which allowed her to save her cash because she did not have to buy food. All the extra food she received she brought to her family in Bagong Silang, even if it meant violating border controls during the hard lockdowns.

The woman's 22-year-old grand-daughter lived with her in their small shed on the sidewalk. The granddaughter gave birth in August 2021. By this time food assistance from the government and private citizens were dwindling. When the granddaughter gave birth, she was not able to breastfeed, so the infant had to be fed with Bear Brand Milk (very low-cost powdered milk for older children). At 7 months, the infant was fed regular food or whatever was available, including coffee.

**55-year-old woman, daily wage earner, urban densely populated.****Bangkok, Thailand.**

The Thai woman in this case study is a 55-year-old single mother living with a son, a daughter-in-law and a 4-year-old niece. She was the breadwinner along with her son. Before the Covid-19 pandemic, she worked as an assistant hairdresser in a beauty salon. Due to the lockdown policy, all the beauty salons were shut down for two months. The woman and her son lost their jobs. Due to fear of Covid-19 infection, not many customers returned to the salon after it re-opened. The woman subsequently earned very little income from working at the salon. Some days, she received only 40 Baht, and at worst did not get any money at all.

Coupled with rising prices of food, her reduced income meant she had to be conscious of food prepared for her family. Her diet changed from "eating whatever we want" to "eating something that is cheap and makes us full". She only ate one meal a day, and sometimes skipped meals. Her 4-year-old niece could not have the fried chicken that she loved to eat. She could only have fried eggs with rice or 2-min noodles. She asked, "egg again? no chicken?". She sometimes innocently told grandma to abandon her if she was a burden.

The woman neither had a welfare card nor received any compensation for business closure because she was an informal worker. She had a 50% co-payment card under which the government would match online spending, but unfortunately, she had no money to add to the online wallet.

She was fortunate to have relatives who helped with some household expenses and shared food. Some of her customers gave her money or paid her to do household chores. Occasionally, she received fish and vegetables from her brother from a rural province. If the impacts of pandemic were to continue, her main concern would be the ability to acquire food for her niece.

Descriptions of change over time varied between respondents and countries. Some respondents described a chronic state of food insecurity even before the pandemic, with the current economic crisis deepening an existing state of financial distress. Some described being better off during the pandemic (i.e., benefiting from cash and food aid) (Box 1); whereas others described struggling with the price of food at the time of the interviews (April–May 2022) due to the additional effect of the war in Ukraine on fuel and food prices. Some described economic struggles now that most of the government support programmes were ending. Many described a slow financial recovery and surviving on incomes that were lower than pre-pandemic, making it hard to pay off debt. Although it was physically easier to source food because mobility restrictions had lifted, declining financial aid meant that some households were still unable to afford enough food.

**3.1.2. Loss of personal agency and food choice**

The severity of mobility restrictions was most evident in the Philippines where, during the height of the lockdowns, respondents described only being able to shop on colour coded market days. Many respondents reported surviving day-to-day and did not have enough money to purchase food for consecutive days; therefore, they described elaborate strategies to circumnavigate community guards to be able to enter the markets on prohibited days. In the Philippines, the frontline workers were exempt from the market scheme and had more freedom of

movement. By comparison, respondents from Thailand described a curfew or community ostracisation against households infected with Covid-19 that limited access to food but still allowed daily food procurement.

"I and my husband had Covid infection and people around our house and in the alley were afraid of us. My son went out to buy some food, but the shop owner denied to sell for us. My son returned home with tears. Then he had to ride a bicycle to buy food far away from our house where no one knows."

**Thailand #47, Female, 55yr, Daily Wage Earner, Peri-urban**

In both countries, many respondents described being restricted to what vendors or food aid stations they could access on foot or via bicycle. Transport costs were perceived as expensive and difficult to acquire during the height of lockdowns, especially in the Philippines. Some described splitting transport fares with family or neighbours. In the Philippines, many households described having a "designated shopper", often a younger member of the household, who had all the relevant paperwork and was fit enough to carry food back by hand. Severity of transport challenges described was higher for elderly respondents (e.g., grandmothers that were caring for large extended families) and in the Philippines compared with Thailand.

In both countries, most respondents described receiving food aid during the pandemic. In the Philippines, most respondents described

food aid distributed by the local government and private donors as limited to long shelf-life foods (i.e., rice, 2-min noodles, canned fish, or corned beef), lacking diversity and in some cases ultra-processed (i.e. 2-minute noodles) and often high in salt (i.e. 2-minute noodles, corned beef). In the Philippines, food packs of these foods were the main component of their diets given the lack or the absence of income due to business closures and absence of public transportation. In the Philippines, many respondents reported that whilst food aid stopped them from starving, it was not considered sufficient to alleviate hunger completely or achieve dietary quality. Some Filipino respondents described a complete loss of income and subsequent reliance on food aid, especially for the homeless and informally employed. Financial stress leading to insufficient food for their children was described by some Filipino respondents who explained making difficult financial decisions, especially for infant formula which was perceived as expensive. Some Filipino respondents described a loss of food choice - "whatever we have is what we eat" "because we are desperate" By contrast in Thailand, food aid was often in the form of ready-made cooked meals often higher in diversity. Community food aid sources (such as Thai community pantries) were more likely to include vegetables or ready-to-eat meals which improved dietary diversity, and some churches in the Philippines ran free community vegetable pantries.

"Whatever we have is what we eat .... That's what I tell my children, eat what is on the table. You shouldn't be picky. You shouldn't be picky during a pandemic."

**Philippines #6, Female, 42yr, Street Vendor, Peri-urban**

In both countries, most respondents described substituting to cheaper foods and cooking less often due to loss of income and in response to fluctuating food and commodity prices. Aside from subsequent food price increases, closure of fruit shops and reduced days for seafood vendors limited food availability in the immediate vicinity for some respondents, especially in Thailand. Many respondents described switching from meat to vegetable-based diets to save money. In the Philippines, some described no longer being able to afford vegetables or buying cheaper lower-quality vegetables. In both countries, respondents described the high cost of meat as a driver of dietary changes to cheaper foods such as lower cost meats or smaller portions (e.g., from pork to smaller portions of chicken or fish) or to vegetables and eggs. The school feeding programs in the Philippines were stopped during the stringent lockdowns. By the time of the interviews, some schools had opened, with school feeding limited to take home milk.

Reliance on long shelf-life canned foods such as rice, instant noodles, and canned sardines was a common theme. Overall, many respondents from the Philippines were more likely to consume long shelf-life foods due to reliance on food aid. While many respondents from Thailand were still eating some fresh produce, several respondents described eating long shelf-life foods if they reduced shopping frequency to reduce exposure to the virus or due to lack of cooking facilities.

### 3.2. Food acquisition, distribution, preparation and consumption change over time

#### 3.2.1. Daily survival

As food budgets tightened, respondents in both countries described severe food insecurity coping strategies, including skipping meals, reducing portion sizes, and rationing food. Respondents described eating fewer times per day (e.g., three meals down to once per day), reducing the variety of foods eaten, and prioritising intra-household food allocation to young children and the elderly. The concept of being "frugal" or "sacrifice" were common words used by Filipino respondents. Respondents with precarious livelihoods were more likely to report rationing food due to lack or absence of income. In the Philippines, some respondents described resorting to 'working for food' either as community kitchen volunteers, frontline community workers, or by roaming the streets to do small errands for people. In the

Philippines, many respondents described a strong need to be self-sufficient or to strategise to earn money for daily survival. For example, when it came to discussing food delivery, Filipino respondents described running a "scheme" where they sold food online to make money on the delivery fee. However, some daily wage earners such as those who scavenged and sold plastics for cash experienced difficulties in setting up "schemes" due to mobility restrictions and subsequent fines.

"We cut our budget for food. I didn't know where to get it because my children's salary is not that big, they just earn the minimum. How do we budget that? So sometimes we eat only 2 times a day. We were really frugal."

**Philippines #17, Female, 57yr, External Migrant, Densely urban**

"I rarely eat right now. When I was with my parents, I was starving. Now, it is almost the same. My son, sometimes asked me if I have eaten? Even though I haven't eaten yet, I have to tell him that I've eaten. Maybe I eat a little bit, afraid of our children, not enough to eat. I have to keep it for them. Even though I am not full, I have to say I am full."

**Thailand #47, Female, 55yr, Daily Wage Earner, Peri-urban**

Although activities changed based on the severity of the mobility restrictions for any given time, overall, the respondents described increasing food shopping frequency because of daily survival and lack of funds to buy food for more than 1 day at a time. Moreover, in Thailand, most visited wet markets daily due to lack of space to store or cook food. However, in the Philippines, shopping frequency was limited due to the colour coding scheme during the height of the strictest lockdowns, which limited food shopping to certain days of the week. In both countries, most bought fresh produce such as vegetables, eggs, and meat from wet markets because they were perceived as cheaper compared with shops (i.e., corner stores/supermarkets). In Thailand, some were limited to vendors that accepted welfare cards; whereas some Filipino respondents described purchasing from vendors that provided informal credit. Some described having food system-based livelihoods as contributing to their ability to acquire food. In the Philippines, respondents in both barangays were unable to grow vegetables due to lack of space, which was described as cramped and surrounded by concrete; however, a couple of respondents described growing green leafy vegetables in small containers to save money. By comparison, the peri-urban areas in Thailand were more likely to report growing and eating own produce.

Respondents who with stable incomes and cold storage were able to stockpile food. In the Philippines, many described stockpiling dry goods (i.e., rice) when they received government cash assistance. In Thailand, respondents described stockpiling dry goods in case of emergency; however, many expressed a preference to purchase fresh produce daily. Ordering food delivery was typically rare among these populations because it was perceived as expensive due to delivery fees and mobile phone data costs, especially in the Philippines. In contrast, several respondents from Thailand described utilising food delivery due to mobility restrictions, convenience, as a treat for children or to avoid exposure to the virus. Others reported that it was hard to acquire quality vegetables from online sources.

"We mostly bought food. We bought at the market then cook it. That's the best way to save ... You used to order a bucket at Jollibee when you got paid ... Now you go where you could save money. You need to be frugal because no one knows when Covid will end."

**Philippines #16, Male, 29yr, External Migrant, Densely populated**

Many respondents from both countries described cooking more frequently at home during the pandemic, with some respondents in the Philippines preparing just one hot meal daily to save money on cooking gas. Cooking at home presented challenges for many, with female respondents describing time constraints linked to the need to prepare and

cook food, as well as the additional time and care taken to clean food products due to concerns about the risk of viral infection. In both countries, many perceived that it was only economically viable to cook at home for large households. However, cramped living conditions in single room rental accommodation and shared units with other families typically rendering cooking space to the hallway, with constraints on electricity usage (i.e., boiling water for 2-min noodles) or gas. Buying ready-made-meals was a strong theme in Thailand. Many respondents perceived that it was cheaper and more convenient to buy ready-made-meals due to the costs associated with cooking ingredients, fuel and the time required to cook, especially for singles or couples. In Thailand, young working parents were more likely to buy ready-made-meals due to time constraints. In both countries, several respondents, especially the homeless and migrant workers, relied on ready-made-meals due to cramped living conditions and lack of cooking facilities.

"I'm in the rented room where the gas stove is not allowed to use inside. Only electric pan is allowed. It limits the kinds of food we can cook."

**Thailand #50, Female, 38yr, Daily Wage Earner, Peri-urban**

### 3.2.2. Social support

Most respondents from both countries claimed they benefited from government cash assistance, alleviating a portion of living expenses. In Thailand, respondents also reported support from a co-payment welfare card that helped to improve affordability of food.

"[The welfare card] helps a lot. I'm going to use the allowance today, I got 800 baht, one card of mine and one of my daughter ... During Covid, we get 400 baht every month for 3 months already. This is an extra 200 baht on top of what we usually get. Today I will use to redeem some rice, cooking oil, canned fish, eggs, it's worth 800 baht."

**Thailand #36, Female, 48yr, Internal Migrant, Densely urban**

However, some respondents in the Philippines described government aid as insufficient. While government assistance was in place, vulnerable groups within society explained difficulties in accessing assistance (e.g., those in quarantine unable to line up to receive cash, elderly unable to endure long hot waiting lines exposed to the sun). Internal migrants who were not well connected to local officials or did not have the correct voting enrolment documents, or because their address was registered in the rural province described being denied cash assistance because their voting records had not been updated to their urban address. In Thailand, external undocumented migrants were fearful of authorities and did not access cash assistance at all.

In the Philippines, food aid was often portrayed as being unequally distributed. Participants who described receiving a lot of food aid described giving away excess, while there were other respondents who missed out altogether. One participant felt that they were being judged for receiving preferential treatment because they were relatives of the barangay official. In Thailand, some respondents described giving away food aid to others who were more in need because they did not like the taste of processed food.

"In our barangay. We were begging them to put us on the list because they were asking if we were voters here. It was for aid right? They would put you on the list if you were a voter registered here. Why did they have to ask that?"

**Philippines #30, Female, 24yr, Unemployed / Young parent, Densely urban**

In both countries, respondents told of the importance of extensive social support networks. Food sharing was a common theme among family, friends, and neighbours, and social networks were used to identify neighbourhood households most in need of food aid. Many respondents, especially in Thailand, described sharing whatever little

extra food aid or cooked food they had in an act of community solidarity. Some respondents also explained how they received rice from relatives in the rural provinces. However, cases of absolute poverty were identified, especially for grandmothers, where respondents described sadness that families were not able to share a meal together because of social distancing policies and lack of ability to purchase enough food.

In both countries, financial support was also obtained through social support networks. Many households described pooling incomes to cover basic living costs. If a household ran out of money, they first asked relatives for financial support. Some, especially Filipino respondents, described receiving remittances from overseas; whereas external and internal migrants in Thailand were more likely to describe sending money to families in Myanmar or the rural provinces. A few described a sense of depression and shame associated with being reliant on family members for financial support. Migrants did not have social support nearby.

If a household member was elderly, sick or in quarantine, respondents often reported reliance on others to acquire food on their behalf. In the Philippines, respondents with strong social networks described elaborate strategies with family, friends, and neighbours to shop for each other on their different coloured market days of the week to circumnavigate severe market restrictions. During enforced quarantine, some Filipino respondents, although rarely, also described ordering food via barangay security guides. In Thailand, respondents described delivering food to family or neighbours during quarantine.

### 3.3. Comparative cross-country summary of findings

Because this study chose to focus on some of the most marginalised populations in urban Bangkok and Manila, a universal finding is that all respondents experienced significant and harmful effects of COVID-19 and its mitigation policies on their experiences of food environments, food security and diets. Every respondent described having to change and adapt to this new reality. Within this overall trend however, there were some important contextual differences among experiences that we can draw out.

Firstly, although everybody suffered, populations from the Philippines were generally hit harder than those from Thailand due to stricter lockdowns that lasted for longer periods of time. Moreover, respondents in Manila were typically worse-off before the pandemic, and so it followed that their experiences tended to be worse. Second, older people, the disabled and the sick found it physically difficult to travel longer distances to markets without motorised transport, and their access to food was therefore more adversely affected by zoning and quarantine restrictions. Third, those with completely reduced food choice experienced heightened reliance on cheaper or long-life foods. However, effects on fresh foods such as vegetables were mixed, as some whose incomes were reduced switched from more expensive meat to less expensive plant foods. Fourth, although support programmes did exist, some groups found it difficult or impossible to access cash transfers or food aid, particularly migrants (both internal and external) who often couldn't sign up due to lack of registration with local authorities. These groups also had fewer local social networks for support and couldn't relocate due to travel restrictions. Those known to have been previously infected by COVID-19 experienced stigma which sometimes affected their ability to procure food locally.

While both the Thai and Philippine governments implemented a range of policies to support their populations, intersecting inequalities meant that some groups were systematically less able to avail of these, even while their food security was hit hardest. Some of these intersecting inequities are illustrated through two lived-experience case-studies in [Box 1](#). These differences point to the importance of understanding context and differentiating policy implementation for different populations with an equity lens.

## 4. Discussion

For the marginalised urban groups in this study, the COVID-19 pandemic manifested as severe impacts on the lived experience of food environments. These impacts exacerbated the pre-existing precarious lives, livelihoods and vulnerabilities to create a palimpsest of public health nutrition-related challenges that have accentuated ongoing dietary trends and hunger. The lived experiences of our respondents illustrate how the pandemic pressurised weak points of the food system, especially in relation to the negative economic impacts (Savary et al., 2020; Béné, 2020). The corollary to shocks and vulnerabilities is often characterised as resilience, in terms of the ways in which people can respond to, cope with and recover, given the resources that they possess (Hoddinott et al., 2023; Jaspars, 2022). For the people represented in our research, resilience was achieved through a combination of personal sacrifice, “scheming”, reliance on government aid, and leveraging social support and networks. In the discussion that follows we consider key findings around the importance of policies to safeguard personal agency, access to social protection and state support, and the role of social capital in ensuring equitable access to nutritious diets.

### 4.1. Personal agency and coping

The findings in our study affirm the prediction that severe mobility restrictions – or ‘lockdowns’ – can have devastating impacts on food security and the lived experience of food environments among marginalised urban groups with large informal employment and patchy social security programs (Birner et al., 2021), supporting evidence from other COVID-19 studies (O Meara et al., 2022; Picchioni et al., 2022; Kimani-Murage et al., 2022; Pongutta et al., 2021; Sidebottom et al., 2022). In our study, lockdowns impaired personal agency – defined as the capacity of individuals or communities to exercise control over their own circumstances (Clapp et al., 2022) – with physical mobility constraints resulting in loss of income coupled with loss of motorised transport, reducing financial and physical access to food vendors.

By inhibiting people’s ability to work, lockdowns eroded financial independence (O Meara et al., 2022; Kimani-Murage et al., 2022; Pongutta et al., 2021). A concurrent food price and affordability study in Bangkok and Manila revealed that household purchasing power was more affected than the price of food (Mwambi et al., 2023). Prior to the COVID-19 pandemic, almost all households in Bangkok could, in principle, afford the minimum cost of the recommended diet, whilst 40% in Manila (5.4 million people) could not (Mwambi et al., 2023). Widespread impacts on purchasing power were subsequently observed during the pandemic, with 14% no longer able to afford the minimum cost of the recommended diet in Bangkok (2.3 million people), and an additional 15% of people in Manila (almost 2 million additional people), respectively (Mwambi et al., 2023).

During times of financial shock, households often switch to alternative food sources (Emiliata et al., 2020; Sidebottom et al., 2022). However, switching to cultivated food can be difficult for densely populated urban areas in South East Asia, where people are dependent on market-bought foods (Pongutta et al., 2021). Stockpiling food is also difficult due to factors such as lack of money to buy food for subsequent days, lack of refrigeration, and cramped living conditions. As a result, many respondents in our study described a greater dependence on wet markets/informal vendors within walking distance, cheaper foods, and food aid. Financial hardship and lack of mobility outside of immediate residential areas – especially during the height of enforced lockdowns or quarantine – drove a reliance on food aid which was predominately comprised of long shelf-life processed foods (i.e. white rice, 2-min noodles), lowering dietary quality. In alignment with other COVID-19 studies, these conditions can result in severe food insecurity coping strategies such as food rationing and meal skipping, as demonstrated in urban Bangkok, Thailand (Pongutta et al., 2021), and reducing dietary diversity, as quantified in a longitudinal food consumption study in rural

and urban contexts of The Gambia (Sidebottom et al., 2022). This has also been framed as a violation of the human right to food as highlighted in urban slums in Nairobi, Kenya (Kimani-Murage et al., 2022). For governments to safeguard dietary quality and the right to food in subsequent shocks, it is critical that crisis response measures are contextualised to the characteristics of local food environments (Turner et al., 2018) within the South East Asian region (Gaupholm et al., 2023) and at the household and personal agency levels (O Meara et al.) to ensure that the most vulnerable within society can always procure and consume a healthy diet (Nisbett et al., 2022; HLPE, 2023).

### 4.2. Social protection and state support

In Thailand and the Philippines, recent research related to this study found that policy to mitigate the impacts of the COVID-19 pandemic (and negative impacts of government ‘lockdown’ mandates on food) fell largely under social protection, through extensions to existing social protection systems, or cash grants (including one-off or multiple) to specific groups (Harris et al.). Distribution of social protection across the Association of Southeast Asian Nations Member States (including the Philippines and Thailand) included cash transfers (68%), utility fees and mortgage waivers (19%, in Indonesia, Malaysia, Myanmar, Singapore and Thailand. No data for Philippines), food transfers (8%), and cash for work programs (5%), mostly in countries with a history of cash deployment for work such as Cambodia, Indonesia, and the Philippines (Secretariat, 2020).

Most respondents in our research reported access to government social protection schemes, both smaller-scale food aid and larger-scale cash transfers. Resilience during the pandemic has been found to be heightened by the provision of formal government social assistance. In Bangladesh, access to cash transfers (but not remittances) was protective against worsening food insecurity during the early phases of the pandemic (Ahmed et al., 2022). In Ethiopia, participation in the social safety net programme offset most food insecurity rises, particularly for the poorest and most remote households (Abay et al., 2023). In Myanmar, existing enrolment in a cash transfer scheme protected against food insecurity and maintained higher dietary diversity during the pandemic (Maffioli et al., 2023). In our findings, respondents credited social protection with reducing hunger to some extent – but cash transfers were not always sufficient to ensure dietary quality. Quantitative studies also found that in Manila – within a country where unemployment rose from 5.1% (2019) to 17.7% (2020) – the social security provided by the government was not sufficient to fully protect recommended diets (Mwambi et al., 2023).

Although various forms of social protection emerged as a lifeline in the lived experiences in this study, major challenges in the implementation of these programmes have been identified in South East Asia, including 1) large scope of the program; 2) lack of a single database for identifying beneficiaries; 3) security and health risks; 4) restrictions on movement and travel; 5) constrained communication and coordination; 6) arduous monitoring, reporting, and audit of fund disbursements; and 7) uneven distribution of cash assistance, as well as food aid, linked to beneficiaries who were well connected to their local government officials (Gudmalin et al., 2021). In our study, some could not access state support, in particular respondents with precarious citizenship such as migrant workers (though some in formal sectors were supported) (Secretariat, 2020), and those with physical inability to queue or access government buildings. These issues have been seen in other contexts and crises, and recommendations suggest that social protection should be made universal (for all); adaptive (over time, to long-term and overlapping crises); comprehensive (covering other aspects of care as well as cash); and perhaps digital (for those who can access the internet more easily than a physical location) (Barron et al., 2022).



### 4.3. Social capital and personal networks

Our respondents drew on a range of social networks depending on their situation before the pandemic. Social capital – a measure of trust and reciprocity between social networks – underpins community resilience (Magis, 2010) and has been shown to be protective against food insecurity (Nosratabadi et al., 2020). The importance of social capital for food security during the pandemic – especially the act of food sharing between family, friends, and neighbours – in this study aligns with those of an online survey of 2015 individuals from 119 countries undertaken during the second month of the pandemic (O Meara et al., 2022) and in the Pacific Islands (Ferguson et al., 2022). Moreover, the mobilisation of religious groups and social networks to distribute food aid within communities in this study aligns with examples of self-help groups utilised in India to distribute nutritious food to women and children (Kant and theBMJopinion, 2021), examples of how existing civic groups are often critical to delivery of food aid in times of need (Singh-Peterson and Lawrence, 2015). However, with an equity lens, we note that not all are equally able to draw on these forms of support, particularly those who live far from family or established community.

Remarkably few studies have explicitly examined the relationship between social capital and food security, with a paucity of studies from urban contexts in low- or middle-income countries. A recent systematic review found that social capital contributes to household food security by improving exchange of food products and knowledge (Nosratabadi et al., 2020). Social support was also associated with improved nutrition outcomes in a longitudinal study of Japanese children during the 2008 global financial crisis (Shiba and Kondo, 2019). These findings and others highlight the emerging importance of social capital to community resilience and food security, supporting the need to track measures such as the national Social Capital Index when monitoring the resilience of food systems (Schneider et al., 2023). It is important to note that social capital is not sufficient to compensate for absolute poverty (Hadley et al., 2007; Sutcliffe et al., 2023), indicating that an equity perspective must be taken when designing policy, and that multi-faceted approaches that provide financial safety nets whilst fostering social capital are necessary to ensure food security for all (HLPE, 2023).

### 4.4. Study strengths and limitations

A strength of this study is the rich qualitative data from marginalised urban groups - who are often hard-to-reach, especially during times of mobility restrictions due to low literacy and lack of internet and phone connectivity which limits participation in online surveys - in two countries in South East Asia during the COVID-19 pandemic. However, this cross-sectional study was undertaken during April–May 2022, two-years into the pandemic, which means that respondents' recollection of early pandemic-related experiences may be influenced by time. It is acknowledged that three of the authors of this study were from high-income-country Caucasian backgrounds (LCO, CT, JH). However, a strength of this study is the strong partnership with two researchers from, and living in, the Philippines (CS) and Thailand (PI) who were involved in every stage of the study, including the design, data collection, and interpretation of the findings, improving validity and reliability of the results. Although this study is of urban respondents from Bangkok and Manila, limiting transferability of findings to other population groups or contexts, our sampling was systematically cognisant of intersectional inequalities, reflecting the most marginalised groups based on social equity theory, and so findings may be generalised to some extent to other marginalised urban groups.

### 4.5. Conclusion

In this study, we found that unpacking the lived experiences of food environments, food security and dietary intake of marginalised urban populations revealed the interplay between structural forces and the

agency of people and communities in the face of shocks. Urban populations face some different food security challenges to rural populations, and our findings support wider literature demonstrating the central impact of pandemic mitigation policies on affordability of and physical access to food (O Meara et al., 2022; Kimani-Murage et al., 2022; Pongutta et al., 2021); the role of social support on the quality of diets that people were able to procure (Kimani-Murage et al., 2022; Pongutta et al., 2021; Sidebottom et al., 2022); the importance but also limitations of government social protection schemes in protecting food security (Abay et al., 2023); and the importance of social networks in community resilience (O Meara et al., 2022; Kimani-Murage et al., 2022; O Meara et al.).

Our research extends this work by focusing on the experiences of some of the most marginalised population groups in urban South East Asia – including the unemployed, daily wage earners/street vendors, and internal/external migrants - by enabling in-depth comparison of experiences across two countries. We find that marginalised urban populations in Bangkok and Manila coped with the impacts of the COVID-19 pandemic-related restrictions through regaining aspects of personal agency where they could; availing themselves of state support where this was available; and drawing on social support networks to fill gaps. Through these routes, marginalised urban populations survived but could not thrive during the pandemic. Resilience therefore is not an unproblematic concept, with focus on supporting the active choices and capacities (agency) of people seen as central to a useful interpretation (Hoddinott et al., 2023), we reinforce calls to caution normalising the occurrence of repeated crisis and the abandonment of marginalised people to their own coping strategies (Jaspars, 2022). Understandings gained through the Covid-19 pandemic should inform crisis policy planning that explicitly considers the lived experience of these populations for future shocks.

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### CRediT authorship contribution statement

**Lydia O'Meara:** Writing – review & editing, Writing – original draft, Formal analysis. **Cristina Sison:** Writing – review & editing, Writing – original draft, Investigation, Data curation. **Pimonpan Isarabhakdi:** Writing – review & editing, Writing – original draft, Investigation, Data curation. **Christopher Turner:** Writing – review & editing, Writing – original draft. **Jody Harris:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Funding acquisition, Conceptualization.

### Declaration of competing interest

The authors declare no competing interests in the preparation of this manuscript.

### Data availability

Data will be made available on request.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.healthplace.2024.103279>.

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