

Urban Food Security in Lilongwe, Malawi

Consumer Reliance on the Small-scale Urban Food Sector

Stephanie A. White,¹ Jessica Kampanje-Phiri,² Carolyn Phiri,² Michael W. Hamm,¹ Kurt Richter¹

¹Michigan State University, ²Lilongwe University of Agriculture and Natural Resources



This brief summarizes significant findings from a collaborative research project conducted by Michigan State University and Lilongwe University of Agriculture and Natural Resources, the goal of which is to better describe and understand urban food exchange in Lilongwe, particularly in relation to sustainable livelihoods and food security. Findings from this work should inform municipal planning processes and other efforts to address urban food insecurity in Lilongwe. Our findings have broader application, as well, because most Africans living in cities are dependent on the small-scale retail food sector, which is commonly influenced by similar factors regardless of geography. Because our research takes a collaborative approach to knowledge development, our methods are likely of value to those interested in enabling inclusive cities.¹

*As critical nodes in regional food networks that link rural producers to urban consumers, retail markets offer important opportunities for understanding food exchange practices, including how consumers rely on them to provision their households. Such research is key to developing policies and interventions that address the specifically **urban factors** of food insecurity, such as condition of infrastructure, municipal policies that govern the use of space, and consumer proximity to markets.*

The African Food Security Urban Network (AFSUN) has conducted studies that show high rates of urban food insecurity in eastern and southern Africa, including Lilongwe.² However, most food security research has focused on rural households and food insecurity is largely construed as a rural issue. Consequently, there is very little research to guide municipal planning around food issues. This analysis is a step forward in remedying that deficit.



Photo credit: Alyssa Cleland

Research Questions

Our research asked four main questions:

1. What is the total tonnage of a defined set of commodities in and out of markets?
2. How many vendors serve that flow of food?
3. From where in Malawi is a defined set of commodities coming from and what is the intensity of food flows from various places?
4. What is the level and variation of market use?

This brief primarily addresses Question 4, and provides a follow-up to a brief published in October 2017 entitled “Regional Supply Chains and the Food Economy of Malawi,” which focuses on the other three questions.

Data collection took place in April of 2017 in nine urban ‘wet’ markets (about 22.5% of open-air markets that sell produce and meat in Lilongwe) over a period of 13 days. Researchers interviewed 488 retailers (230 women, 258 men) and 2756 consumers (1821 women, 935 men). Follow-up focus group discussions and key informant interviews in four markets during the month of August helped to expand and clarify preliminary findings.

¹ Goal 11 of the Sustainable Development Goals is to “Make cities and human settlements inclusive, safe, resilient, and sustainable.”

² AFSUN publications are available at www.afsun.org

Major Findings

Frequency of Consumer Shopping Tied to Income Precarity and Urban Under-Employment

Consumers rely almost exclusively on neighborhood markets (Figure 1), visit them frequently (Figure 2), and rarely shop at supermarkets (Figure 3).



Figure 1: Primary source of purchased food.

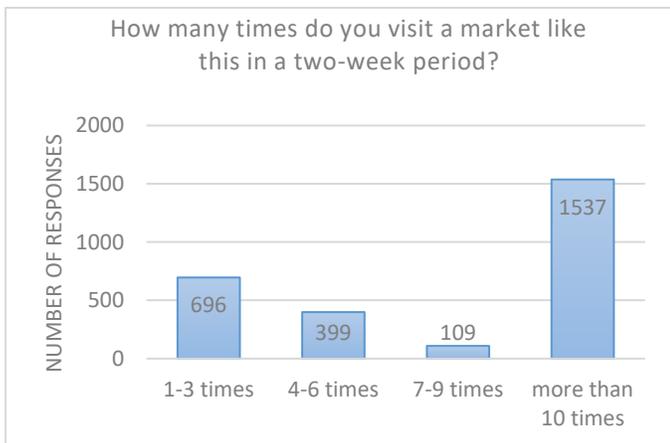


Figure 2: Frequency of visits to market

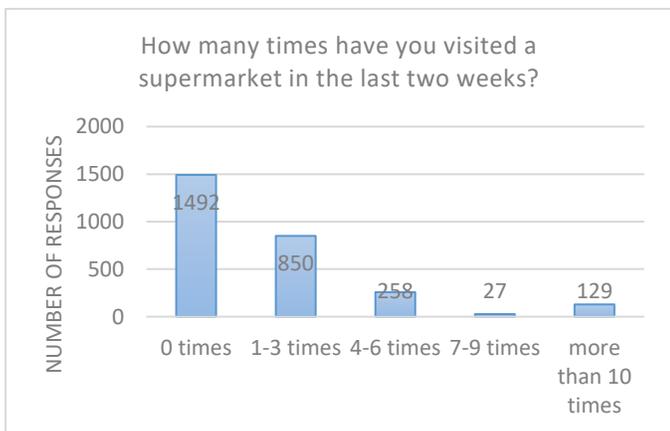


Figure 3: Times to supermarket in past two weeks.

Researchers hypothesized that shopping frequency in neighborhood markets was due to:

- Lack of home storage facilities,
- Poverty - consumers could only afford to purchase small amounts at a time.

Retailers clarified that customers commonly shop *multiple times per day* due to very limited incomes, which reveals a sharply more precarious level of food insecurity than originally assumed. A retailer in Mboni market explained:

“... these people have low incomes. They rely on piecemeal and when they find some money for that particular moment, they can afford to buy. Most of the people here don’t have permanent jobs...people come to buy whenever they find some cash.”

This finding highlights apparently widespread livelihood precarity and urban under-employment.

Urban Food Security Hinges on Price, which Fluctuates Over the Course of a Year

The seasonality of production systems affects price and supply of most items. Some retailers make an effort to keep items in stock, but operating costs commonly increase because they have to travel further to replenish or because the supply is increasingly constrained relative to demand. Given that poor consumers are most sensitive to price changes, one would expect that these seasonal price swings cause many households to experience intensified food insecurity due to (1) lack of availability of certain items, and (2) inability to purchase certain items.

Likewise, diets are seasonal. Figure 4 depicts the waxing and waning availability of a number of food items over the course of a year. As a food item becomes scarce, its price increases.

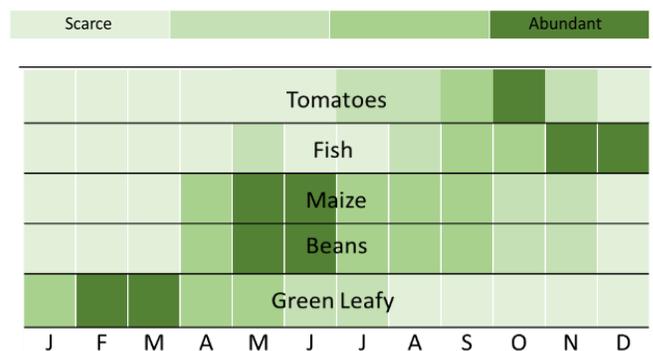


Figure 4: Annual seasonality of food in Lilongwe markets

Gender and Urban Food Security

To get a fuller understanding of the factors that enable food security in particular places, it is necessary to understand interactions of social, economic, environmental, and spatial dimensions of food systems. Gender is one analytical frame that provides insight into how people differentially experience food environments.

Relatively equal numbers of men and women work as urban food retailers, but the customer base is comprised primarily of women (Figure 5).



Figure 5: Retailer/Consumer gender

3 In all markets customers overwhelmingly buy food for home consumption. However, in some markets a significant percentage of customers were buying items to re-sell at a different location. The dots on Figure 6 (refer to right Y-axis) indicate the percentage of customers who said they were buying items to re-sell or to both re-sell and consume in the home.

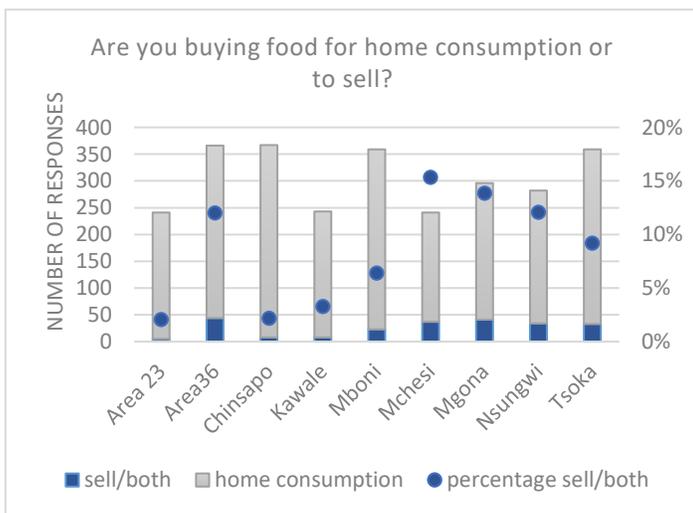


Figure 6: Customers purchase to sell or consume

Homing in on markets where buying to re-sell is more common, the data show that both men and women do this in equal percentages. Because women make up more of the customer base, however, the absolute numbers of women are higher.

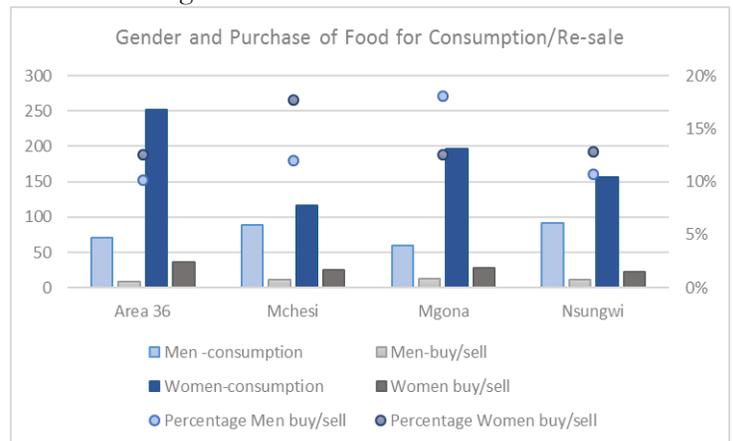


Figure 7: Purchase for consumption/re-sale by sex

In many African cities, women commonly sell cooked food and raw ingredients from their houses. This provides a small income and a convenience for neighbors.

Women typically experience mobility constraints so that neighborhood markets within walking distance are a critical aspect of food access. Markets typically serve surrounding communities (Figure 8).

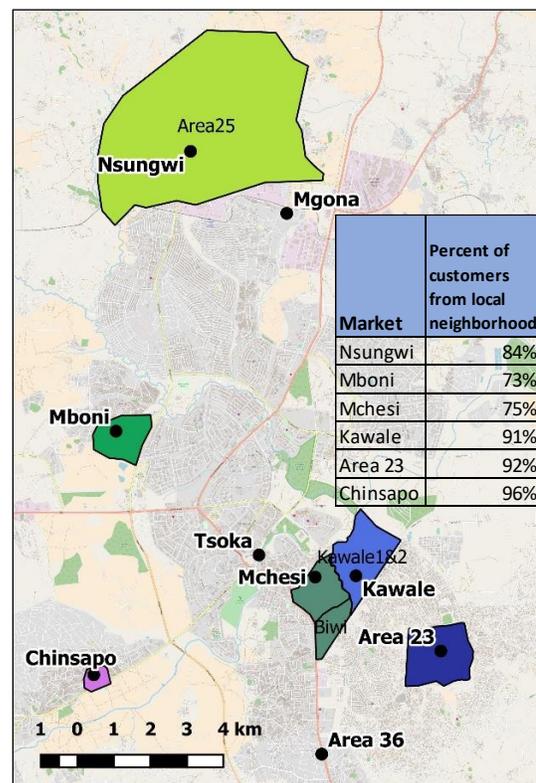
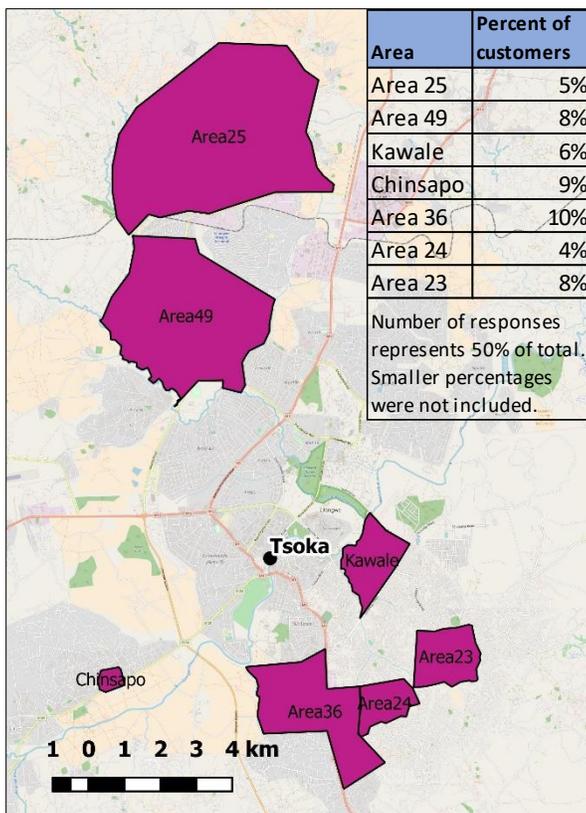


Figure 8: Percentage of customers living close to market

We expected that Tsoka market would serve a larger population of re-sellers given that the market is known as an in-town wholesale market. However, as Figure 6 shows, relatively few Tsoka customers intended to re-sell their purchases. Interestingly, the data show that customers hail from all over the city (Figure 9). The percentages in the box refer to the number of customers citing that area as their home residence, which is in sharp contrast to most other markets. This is likely due to the

do not have enough money to buy even the smallest increments available. In those cases, retailers report several ways of thinking about transactions that permit the food exchange to take place: (1) offer credit, (2) sell at a loss with the assumption that the loss will be made up in a different context or time, and (3) further reduce the smallest increment. A retailer from Mgoni explains:

“We welcome our customers well and we don’t allow them to just leave our place without buying what they need because they have little amount of money as compared to the food product they need. Suppose the customer wanted to buy 1kg of maize flour, which we sell at 200 Kwacha, yet they only have 150 Kwacha. We give them .75 kg. Others may have 50 kwacha and they want maize flour for making porridge. We don’t send them back but we just give them a small amount so that they may use the flour for whatever they wanted to use it for.”



Conclusions and Future Research Direction

This study sheds light on small-scale food exchange and its role in urban food security. Evidence that demonstrates the value of these markets in relation to urban food security and livelihood helps to understand how supporting them can promote urban wellbeing. As vital nodes in food systems that link rural producers with urban consumers, understanding urban food exchange is also critical to developing rural livelihoods.

Our research highlights the variability and complexity of markets and urban food security. Studies that expand the inquiry to different parts of the year and day would reveal even more variability, which would help to appropriately reveal and respond to the complexity of food environments. For example, longitudinal data on seasonality would help to develop approaches to ‘smoothing out’ food availability and food prices. Where, for example, do opportunities exist for food processing or for season extension? How much price change can consumers tolerate? Such data should be understood in a context of climate change and in collaborative forums with communities, governments, and investors to strategically develop solutions, including how to create employment and develop infrastructure.

Lastly, a collaborative analysis with the community helps to create a research environment characterized by trust and accountability, and generates research questions that are relevant to the populations most affected, but most often marginalized.

Figure 9: Percentage of Tsoka customers from areas around city relatively inexpensive prices at Tsoka and its location at a busy crossroads and transit exchange point, which makes it a convenient place to pick up items on the way home from work or as one is passing by on their way to somewhere else. It is likely, however, that different customers populate the market at different times of day. For example, the number of customers planning to re-sell may be higher very early in the morning.

Lastly, it is important to note how relationships and exchange practices between retailers and customers help to mitigate urban food insecurity. Unlike supermarkets, informal markets make food available in very small quantities, which is an important quality of a food system that needs to meet the needs of poor people. Even so, it appears to be a relatively common occurrence that people