

Regional Supply Chains and the Food Economy of Malawi

Expanding Livelihood Opportunities and Enhancing Food Security

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This brief provides an overview of a unique data set that begins to systematically examine the regional supply chain in Lilongwe, Malawi. Sometimes referred to as ‘informal’ or ‘traditional,’ the regional food sector is critical to rural and urban food security and is a common and important source of income for men and women along the value chain and throughout the country. It will remain important to urban/rural food security and livelihood for decades.

Over the past thirty years, the primary focus for support in African regional food systems has been on smallholder production. Much of that support has been oriented towards improving the production capacity of farmers and their ability to participate in a globalized system of trade. Though the well-being of farmers is tightly linked with the fortunes of other regional food system actors, there has been surprisingly little research that examines how interventions and investments might be carried out and coordinated to support integrated development of the regional food economy and this regional supply chain.

Our work has demonstrated that the inability to make changes that benefit market communities is an outcome of poverty, thin profit margins, and inadequate responsiveness by municipal government and market managers. We've shown that change is possible, and is likely to be more sustainable and responsive if carried out in collaboration with multiple groups of food system actors.

The analysis presented in this brief is a step forward in addressing that need. We provide a summary snapshot of data collected to date and convey a sense of what might be done with more extensive research and engagement. Significantly, this research includes the full engagement of city and district decision-makers and Lilongwe's small- to medium-scale food retailers.



Photo credit: Alyssa Colandrea

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?

Data collection took place in April of 2017 in nine urban ‘wet’ markets (markets that sell produce and meat) over a period of 13 days.

To get a sense of food flows into and out of markets, the research team created a representative commodity basket that was tracked over a 3-day period. The commodity basket included grains, legumes, vegetables, and fruits commonly available in Lilongwe markets: tomato, onion, cabbage, banana, avocado, dry maize, rice, groundnut, beans, and Irish potato. A total of 488 retailers (230 women, 258 men) and 2756 consumers (1821 women, 935 men) were interviewed.

Major Findings

Markets are Diverse and Cater to Diverse Socioeconomic Populations, Including the Very Poor

Lilongwe’s markets are highly variable in terms of size, food prices, the populations they serve, and volumes of commodities that flow through them. Some markets primarily serve low-income neighborhoods (e.g. Nsungwi, Mgona, Mboni) while others may be relatively more important as city food hubs (e.g. Mchesi, Tsoka, Area 36), i.e. markets that retailers source from.

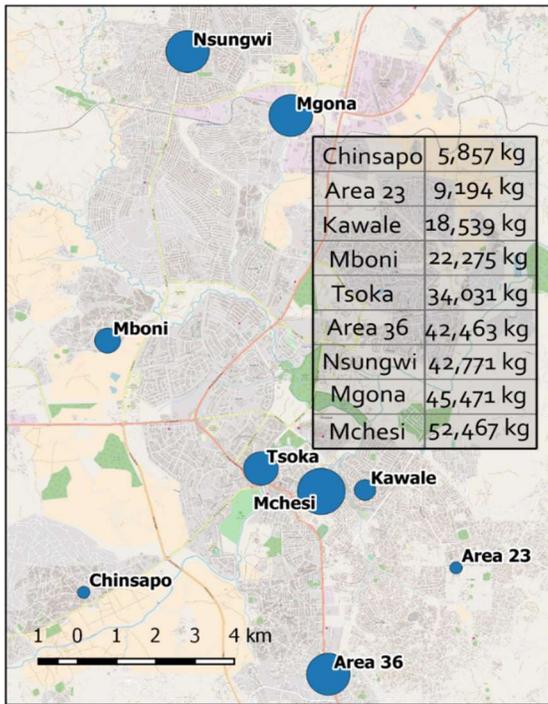


Figure 1: Three-day commodity basket inflow

In conjunction with demographic projections, a sense of the relative food volumes flowing through markets provides important baseline information to city governments when prioritizing investments or developing plans that would be most helpful in responding to the immediate needs at those markets. Figure 1 gives a sense of the relative size of markets based on commodity basket inflow over the 3-day monitoring period. Notable is the size of Area 36, which is a new ‘spontaneous’ market that is housed on private land. It is opposed by the municipal government due to concerns over safety and lack of infrastructure. Retailers, while also concerned about safety and infrastructure, say the market suits their needs because spots are available on a first-come, first-serve basis, which is in contrast to most other markets.

Neighborhood markets are critically important to urban food security because many people must shop daily, buy food in very small quantities, and generally cannot rely on

motorized transportation. To the question, ‘Where do you usually shop?’ 81% of respondents said they generally shop at traditional markets (Figure 2) – illustrating the absolute importance of these markets.

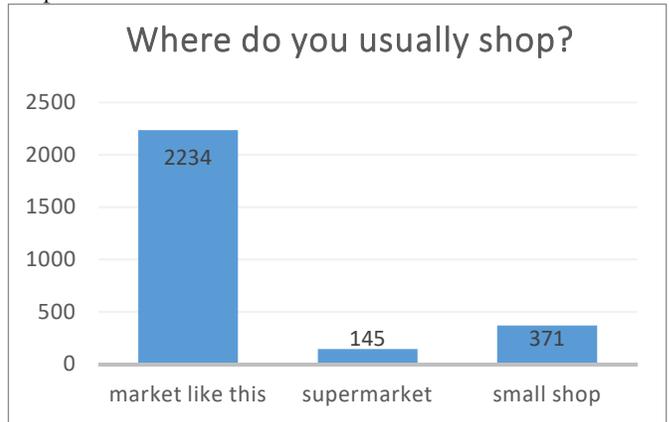


Figure 2: Consumer reliance on traditional markets (n=2,750 consumers)

Lilongwe Relies on Rural Producers across Country

Rural producers are feeding Lilongwe. Figure 3 illustrates sources most commonly cited by retailers.

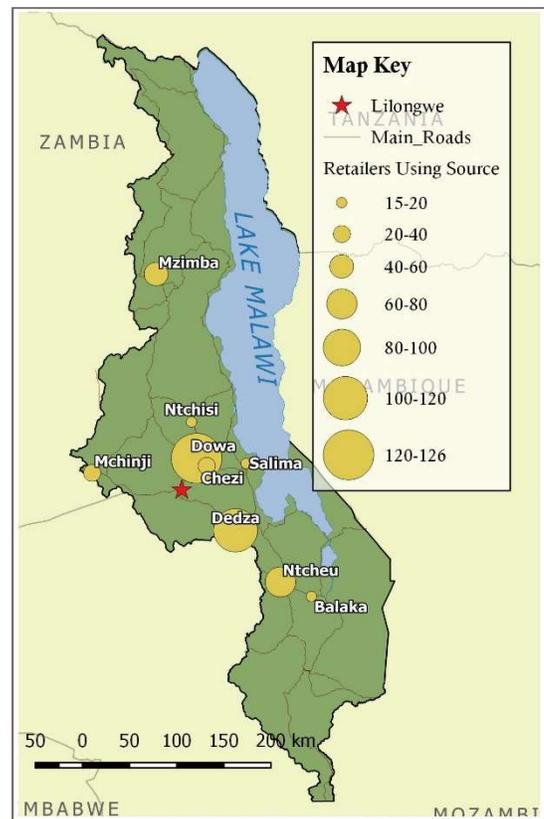


Figure 3: Major food sources. Circle size indicates frequency source was cited.

To acquire commodities, retailers travel in the backs of trucks or in crowded buses. Accidents are common and will likely become more frequent as Lilongwe grows and more food will need to be brought into the city.

Retailers commonly acquire commodities from multiple sources. Figure 4 represents 864 responses by 488 retailers. A notable finding is that many retailers reported sourcing from an individualized or minor source. In follow-up interviews retailers said that during periods of seasonal scarcity they often travel ‘off the beaten path’ to find sources that are not easily accessible.

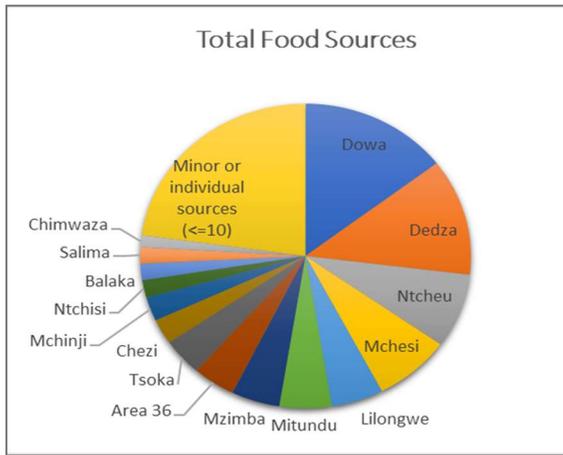


Figure 4: Total Commodity Sources Reported by Retailers (n=864)

Retailers Manage Environmental and Social Conditions but Ability to Grow Business is Frustrated

Traditional food marketing networks have sometimes been characterized as chaotic and inefficient, a situation which is construed as lack of modern practices and technologies. However, what appears to be chaos and inefficiency may, upon closer examination, be better understood as logical responses to food system conditions.

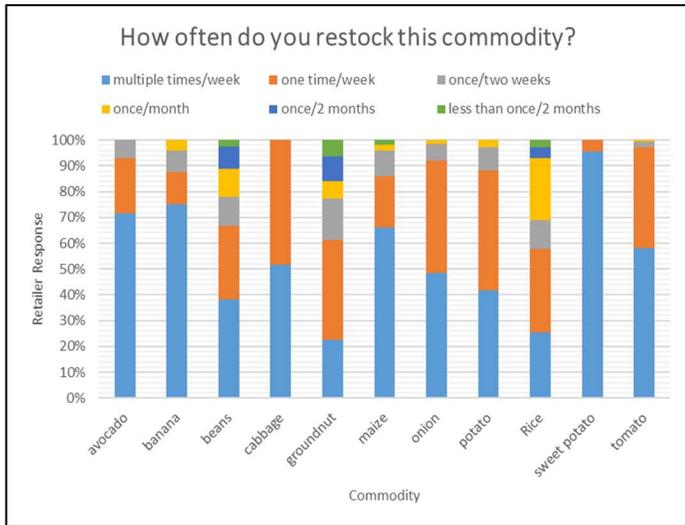


Figure 5: Frequency of commodity restocking

Figure 5 illustrates the frequency that retailers report restocking individual commodities. In general, most retailers restock at least once per week (orange), while many of them must restock multiple times per week (lighter blue). Retailers are able to stock only limited quantities of produce because they have small amounts of

capital to draw on, must be able to carry their produce in and out of markets, and/or because they have limited appropriate storage capacity. Consequently, they are spending considerable time, energy, and capital restocking.

We found that women and men trade in all of the selected commodities, but that, on average, men handle higher

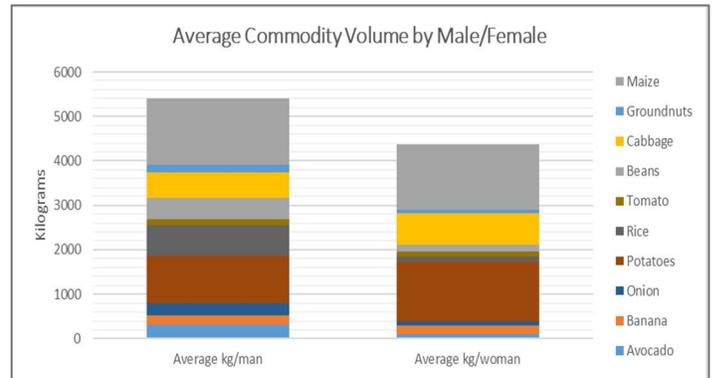


Figure 6: Average volumes of commodity inflow over 3-day monitoring period

volumes (Figure 6). Follow-up interviews found that women had a more difficult time accessing and maintaining operating capital.

Where to Next? Research that Results in More Equitable and Resilient Food Systems

Better understanding retailer-producer-consumer connections and the challenges associated with moving food to the city can help to develop targeted strategies for reducing costs and barriers, which, in turn, can help to raise incomes of both retailers and farmers and improve urban and rural food security. Our analysis suggests several different areas of needed research and engagement:

- Retailers organize practices that respond to system conditions. More precisely understanding how retailers respond to and manage difficult conditions can help to identify and address those underlying conditions – e.g. appropriate and secure market storage.
- There are a few major hubs for retailer food sourcing outside of Lilongwe, and many smaller hubs and minor sources that might be further developed through targeted investment to reduce vulnerability to food insecurity.
- Gender influences development outcomes. Applying a gender lens to supply chain analysis will reveal differential experiences and inform varied strategies to address constraints and promote opportunities.
- Exploring consumer shopping habits, needs, and constraints coupled to emerging demographic trends will provide policy and investment strategies to improve urban food security in an increasingly urban environment.