Examining the Role of Urban Food Spaces: A Neighborhood Level Exploration of Food Geographies in Accra, Ghana

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Introduction

This paper explicates results from in-depth household interviews conducted with a subset of respondents from the Women’s Health Survey in Accra (WHSA). It explores the factors surrounding household food security using a broader range of factors derived from the food security literature and other factors developed specifically for the intra-urban nature of this study.

Both quantitative and qualitative studies have been used to research food security (Ravallion, 2001; Davis, 2002; Pittaluga et al, 2004), though the number of studies that combines these methods remains small (Kanbur, 2001). Large national-level surveys are conducted regularly by international institutions (UN, World Bank, DHS) or government ministries (see Chapter 2). These surveys rely most heavily on standardized markers such as anthropometric measures to discern levels of food insecurity. The datasets tend to oversample rural populations while under-sampling urban ones – thus limiting the data available for urban analysis. Furthermore, rural food security surveys have tended to focus on bio-markers.

The importance of qualitative studies in food security research emerged in the early 1990s. New methods of collecting data, such as the “participatory approach”, were rooted in the conviction that food insecure individuals are as important as the descriptive data that represent their lives (Pittaluga et al, 2004). By allowing research subjects to fully participate in the research process, their perceptions, experiences and concerns regarding poverty and food insecurity can be recorded. Through these dialogues, researchers build samples of “vignettes” to illuminate the context in which an individual or household operates. They open a window on how different socio-economic groups may negotiate access to resources or political power.

Data and Methods

The Survey

Household interviews were undertaken during the months of August, September, and October, 2007 in Accra, Ghana. A total of thirty women (approximately 10 from three

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different neighborhoods) were interviewed as explained further below. Women were asked a suite of questions covering the following sub-categories of the conceptual model:

<table>
<thead>
<tr>
<th>Socio-Economic Status</th>
<th>Home Environment</th>
<th>Neighborhood Environment</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Access</td>
<td>Descriptive Observations</td>
<td>Perception of Neighborhood and Community</td>
<td>Food Consumption</td>
</tr>
<tr>
<td>Nutrition Transition</td>
<td>Ownership of Appliances</td>
<td>Public Services</td>
<td>Perception of Diet and Nutritional Health</td>
</tr>
</tbody>
</table>

Questions under these four categories were designed to complement information in the WHS which lacked sufficient depth in its Food Security section. None of these areas was addressed in the WHS and yet they are key to contextualizing the research questions. One of the main objectives of this study was to illuminate the intra-urban differences which exist in terms of nutritional health and food security.

Answers were organized by neighborhood and compared for similarities or significant differences. Neighborhood level predictors were of particular interest and recorded. New information was collected from the qualitative survey which helped interpret data supplied by the quantitative survey.

Approximately ten women were interviewed from each of three neighborhoods: Nima, Jamestown, and Cantonments (Figure 1). The neighborhoods were chosen to capture distinct geographical, neighborhood, and social experiences in Accra and to determine whether differences are reflected in a household's access to food. Nima, Jamestown, and Cantonments differ in their demographic profile, availability of food markets, and organization of social networks. Some of these factors were captured by the quantitative data set but others, such as “neighborhood experience”, were not. Qualitative data collection, therefore, was necessary to capture these intangible variables, not easily measured by any standard survey. Women who participated in this study were effusive in speaking about food and nutrition since “food management” is core to their household responsibility. But it was also clear that these women had different choices and opportunities based on their neighborhood location and socio-economic standing.

Nima is one of the largest and oldest slum areas of Accra. Once on the outskirts of the city, Nima has been engulfed by steady urban growth and is now centrally located. Its boundaries are delineated by large transport arteries to the south, east and north. Jamestown is located in the south-central area of Accra overlooking the shoreline. Cantonments sits in the north-eastern quadrant of the city. It was an area originally built by British colonialists and served as the central military headquarters.

Results
Socio-economic Status
The proportion of household income spent on food is usually a good indicator of household socio-economic status (FAO, 2008). Households with greater wealth and disposable incomes spend a smaller proportion of their income on food. Poor households, on the other hand, spend large proportions of their income on food, making them more vulnerable to food insecurity. Small fluctuations in food prices, for example, can significantly impact a household’s budget and living expenses.

When the bulk of household income is spent on food, households are considered to be food insecure. Food was the greatest household budgetary expense for the majority of households in all three neighborhoods. At 54%, Nima had the smallest rate of household food insecurity among respondents, and Cantonments had the greatest at nearly 67%. The results were unexpected. As a neighborhood known for its higher socio-economic status, Cantonments was theoretically the least likely to have the largest comparative proportion of food insecure households. Conversely, Nima, a well known slum area of Accra, was expected to have the most.

Respondents were also asked if they had access to a fridge or ownership of a fridge to store their food. In both Nima (64%) and Cantonments (78%), the majority of households had access to refrigeration. In Jamestown, the difference was split 50-50. Here, the trends are also in agreement with the quantitative survey. If we draw comparisons with other food security variables, we see that households that have access to a fridge are also ones that tend to be more food secure. Refrigeration can affect both access and utilization. A large household appliance such as a fridge is also an indicator of wealth, thus indicating more household wealth to be directed towards food. It is also an assurance against food-borne illness. Refrigeration allows food to be better preserved and protected from bacteria and other vectors.

**Home environment**

An important aspect of food security is access to clean water (Rosegrant and Cline, 2002). A majority of correspondents indicated that they indeed had piped water. The majority of households with piped water had infrastructure that was out of service for all or most of the year. In Nima, 18% of the households interviewed had access to their own working private tap. Of these households, however, all reported that the service was for the most part reliable. In Cantonments, over 44% of households had access to a private tap. But when asked if those taps flowed reliably, that number dropped to 22%. In Jamestown, the oldest and most established of these three neighborhoods, no household had a private tap with running water. Households lacking private water sources must also use the few public toilet facilities located in each neighborhood. Each lavatory visit costs an average of 5 cents.

**Neighborhood environment**

All households in Nima had easy access to the large food market which is a staple of the neighborhood. Therefore, food could be purchased easily on a daily basis if needed, without the extra cost of traveling outside the neighborhood area for food. Both Cantonments and Jamestown lack neighborhood food markets. Food purchases are made through ambulatory vendors or at kiosks selling “provisions” or non-perishable goods. Households without access to a neighborhood market were more likely to consume non-traditional or highly processed foods.

In Nima, where all participants had access to a neighborhood food market, fewer than 30% admitted to buying processed or non-traditional foods. In Cantonments, where there is no access to a neighborhood market, that figure shot up to nearly 90%. And in Jamestown, that number was 81%. The importance of having community food sources for nutritional health has been shown in the “food desert” literature (Whelen et al, 2002) with most examples emanating from the United States. The research shows that many low-income neighborhoods in the U.S. are entirely deprived of supermarkets or other sources of
fresh, non-processed foods. Households therefore have few local food choices and are more likely to consume processed or fast foods. Studies have shown that this type of neighborhood effect has contributed to a higher incidence of nutrition related diseases such as second onset diabetes, heart disease and high blood pressure, and some types of cancers (Popkins, 1993, 2002).

Food markets were planned in the old center of the city and, except for Keneshie Market, have not proliferated into other neighborhoods (Grant and Yankson, 2003; Lardemelle, 1996). Therefore, most residents of Accra must travel to the center of the city to access a fresh food market, limiting their food choices on days that they do not have access to those markets. How the spatial organization of food markets affects household food and nutrition security is not immediately quantifiable from this study, but suggests the importance of further inquiry and examination.

Health

Most women knew to wash fruits and vegetables before eating, but almost never boiled their drinking water. Similarly they were not as diligent in washing their hands (or encouraging children to wash their hands) before preparing food or eating. In Ghana, as in most of sub-Saharan Africa, food is usually consumed with bare hands, and children often share a single large bowl containing the day’s meal. This way of eating facilitates the spread of harmful bacteria if hand-washing is not routine. The practice of keeping small livestock in communal cooking and eating areas attracts vectors such as flies and is also a high health risk to the household. Many women who were interviewed reported that they either had or were recently diagnosed with typhoid fever, but were not aware that typhoid is primarily a food borne illness and can easily be spread if basic hygiene is not practiced.

Typhoid, malaria or simply “fever” were commonly reported among the women interviewed, despite the percentage of women reporting these same ailments being only around 11% in the WHSA. Self reported health variables in the qualitative interviews were mixed. In Nima and Jamestown, the number of women who reported good health was nearly even with the number of women who reported ill health. Yet there was no significant relationship in the data between the quality of health and household food security. In Cantonments, 78% of the women interviewed reported good health, a significant departure from the health outcomes in the other two neighborhoods. Yet in Cantonments, the majority of households was food insecure.

Conclusion

In examining the spatial organization of food secure households, the results suggested that food insecurity was loosely concentrated in certain areas of the city. The organic and relatively unplanned growth of a city like Accra has favored a greater socio-economic mix of households across the city, meaning that variability in the results is more apparent at the household than at the neighborhood level. However, the quantitative survey did not inquire about distance to market, which in the qualitative interviews emerged as an important predictor of food security.

The urban environment is dynamic and changing, and livelihoods and economic opportunities are less stable and reliable than traditional social structures in rural areas (although those are also under constant and severe economic pressure). Social roles are no longer contingent on the success of a larger community. Instead, livelihoods are sought for personal gain and for the survival of smaller family units. Therefore, variables which represent greater stability (housing tenure) and accumulation of wealth (ownership of a refrigerator and adequate bathing facilities) can be interpreted as a household’s successful integration into, and navigation of, the urban environment. Similarly, the responsibility of the municipality rather than the individual for solid waste collection indicates social mobility.
in a city where a significant proportion of neighborhoods still remain out of reach of basic public services.

With rapid urbanization occurring in developing countries, studies which provide an intra-urban analysis of the population are increasingly important. The variability in socio-economic status and neighborhood experience within these growing urban areas is a signal that policy must be re-informed by disaggregated studies. Food security is experienced differently across neighborhoods based on local obstacles and opportunities. With food prices rising rapidly across the globe, it is important to understand their impact on urban households. Neighborhood level policy can help communities, in both the short and long term, weather the difficulties in accessing sufficient quantities of healthy, nutritious, and culturally appropriate foods.

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