Rapidly rising food prices and the experience of food insecurity in urban Ethiopia: Impacts on health and well-being

Craig Hadley a,*, Edward Geoffrey Jenediah Stevenson b,*, Yemesrach Tadesse a, Tefera Belachew c

*Emory University, Department of Anthropology, 1557 Dickey Drive, AT1, GA 30030, United States
bEmory University, Hubert Department of Global Health, Rollins School of Public Health, United States
cJimma University, Department of Family Health and Population, Ethiopia

A R T I C L E   I N F O

Article history:
Available online 26 September 2012

Keywords:
Ethiopia
Food prices
Food crisis
Food security
Food-sharing
Coffee

A B S T R A C T

The rise in food prices since 2007 is widely recognized as signaling a crisis of food insecurity among the world’s poor. Scholars sought to chart the impacts of the crisis on food insecurity by conducting simulation studies, assessing anthropometric outcomes, and evaluating shifts in experience-based measures of food security. Few studies, however, have investigated the broader impacts on those most vulnerable and how rapid rises in food prices play out in the everyday lives of those most impacted. We used qualitative methods to investigate the impact of the rise in food prices on the urban poor in Ethiopia. Twenty semi-structured interviews were conducted in August 2011, in the provincial town of Jimma. Themes identified in these interviews included coping strategies, consumption priorities, and impacts on institutional networks of sharing. Our results suggest that several important cultural practices, including funerals and coffee ceremonies, were undermined by the rise in prices, and that respondents linked food prices to increasing food insecurity, which they in turn linked to high levels of stress, poor mental health, and reduced physical health. Our results are consistent with several other studies that suggest that food insecurity has a range of non-nutritional consequences, and that these are due in part to the highly social nature of food. Recognizing the effects of food insecurity on dimensions of everyday life such as interaction with neighbors, and feelings of shame, draws attention to the potential for food price increases to have erosive effects on communal social capital, and to increase the vulnerability of affected peoples to future shocks.

© 2012 Elsevier Ltd. All rights reserved.

Introduction

Since 2007, world food prices have increased sharply, with spikes in 2008 and 2010/2011 (Fig. 1). Studies primarily from lower-income countries conducted during 2007/8, using quantitative indicators such as experience-based insecurity scales and measures of dietary diversity or caloric-intake, showed concurrent decreases in household food security (Compton, Wiggins, & Keats, 2010). Food security is defined as a condition in which people have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life (FAO, 2012). The combination of rising food prices and decreasing food security has been widely recognized as signaling a food crisis for the poor (e.g., Brown, 2011; FAO, 2011). Some have specifically hypothesized that food price increases will be particularly damaging for urban dwellers’ food security because urban dwellers are more exposed to market prices. Since people require food, regardless of its price, food is considered to be inelastic compared to other commodities: the demand for food stays constant in the face of changing prices. This means that when food prices rise, and budgets remained fixed (or decline), then people will have to make difficult allocation decisions among expenditures to ensure they meet their food and non-food demands. These trade-offs are particularly acute for the poor, for whom food expenditures represent a large portion of their total income (Engel’s law). Rapid increase in food prices should therefore impact on the well-being of the poor in multiple ways, including increasing nutritional deficits and psycho-social stress, and decreasing social capital.

During the 2008 food crisis in Ethiopia “food price increases were particularly high, ranging from 83 percent to 184 percent” across differing cereal markets (Minot, 2010, p. 11), one of “the strongest acceleration[s] of food price inflation [in any country] during recent years” (Loening, Durevall, & Birru, 2009, p. 3). While prices in Ethiopia subsided somewhat after the 2008 price peak (but still remained higher than 2004), they began to rise again in late 2009 and remained high as of October 2011. Fig. 2 gives some
indication of the magnitude of the price increase for one staple grain, teff. Between 2006 and the time of this study the price of teff rose from approximately 2 birr/kg to 9.5 birr/kg (cf. Heinlein, 2011).

What has been the impact of these food price increases on household food insecurity in Ethiopia? Recent studies of food insecurity during the 2008 food crisis, including some from Ethiopia, have used quantitative indicators such as experience-based measures of food insecurity, dietary diversity, or caloric-intake to assess shifts in consumption to assess the impact of the crisis on well-being. These studies agree that food insecurity has increased markedly during the food crisis, with urban and rural dwellers being impacted alike (Alem & Söderbom, 2011; Amare, 2010; Hadley et al., 2011; Ulimwengu, Workneh, & Paulos, 2009). Ulimwengu et al. (2009) used pre-crisis survey data to simulate the caloric loss expected for Ethiopians given a 50% increase in food prices. They concluded that a 50% increase in food prices would result in a 7–25% decline in caloric consumption, with some evidence suggesting that rural areas would be harder hit. Hadley et al. (2011), using data from Jimma zone, showed a broad deterioration in household food security, as measured by a subjective food insecurity measure, with the rural and urban poor showing the largest decline in food security. Alem and Söderbom (2011) reported on caloric losses due to the shock of the food prices increase in urban Ethiopian settings and demonstrated that consumption and consumption growth was lowest during periods of rapid food price increases, and this was most true for households with the fewest assets. There is thus consensus that poorer households were more affected by rapidly rising food prices in urban and rural Ethiopia. A host of studies have investigated the food crises in other countries, with most using estimates of expected caloric losses (Ivanic & Martin, 2008) or shifts in eating behaviors or anthropometric outcomes, mostly among children (Compton et al., 2010), all of which suggest a deterioration of food insecurity as prices rose. These studies have often focused more on who is affected but less on how they are affected.

One way to assess the extent to which a household is affected by food insecurity is to explore coping strategies. Coping strategies are defined as short-term responses to an immediate and habitual decline in access to food (Davies, 1996). A number of authors, relying on case reports and primary research, have shown that these coping strategies typically follow a “managed process” that operates along two dimensions (e.g., Corbett, 1988; Dirks, 1980; Radimer, Olson, Greene, Campbell, & Habicht, 1992; Shipton, 1990). One of these dimensions is reversibility: as households face food insecurity they first adopt strategies that are reversible and only move to irreversible strategies, such as selling productive assets, when situations do not improve (e.g., Watts, 1988). The second dimension pertains to food: as food insecurity intensifies, households first alter what they eat; only later do they alter how much they eat. Shifts also occur in who eats (Coates et al., 2006). Existing literature on Ethiopian coping strategies largely follows this paradigm with the inclusion of relying on iquub, a rotating savings group (Dercon, De Weerdt, & Pankhurst, 2006). Coping strategies also can fall under food and non-food based strategies. These studies suggest that households invoke coping strategies in response to food price rises, that these coping strategies are patterned along a dimension of reversibility—irreversibility and a dimension of quality—quantity of food, and that they may be food or non-food based.
Since food is central to many social interactions, and is imbued with diverse social and cultural meanings, insecure access to food has implications for well-being in other ways than simply impaired nutrition, which has been the focus of much existing, often simulation-based work. Consistent with our focus on non-nutritional consequences of food insecurity, studies of food security conducted before the food crisis demonstrated that in addition to effects on diet, food insecurity impacts negatively on well-being through pathways including shame (Nanama & Frongillo, 2011), psychosocial distress (Hadley & Patil, 2006; Weaver & Hadley, 2009), and declines in participation in social and ceremonial activities (Hamelin, Beaudry, & Habicht, 2002; Shipton, 1990).

In this paper we report on a qualitative study conducted during the 2011 food crisis that used qualitative methods to assess the impact of rising food prices on well-being for people living in poverty in urban Ethiopia. We focus particularly on expressions of food insecurity, on individuals’ decisions regarding household spending on food vs. other commodities, the perceived health effects of food insecurity, and on the effects of the rise in food prices on patterns of food sharing enshrined in local institutions.

Methods

Twenty households were identified in two kebeles (local administrative units) out of a total of 13 kebeles in Jimma, the major urban center of southwest Ethiopia (population circa 160,000). Households were selected with the assistance of local administrators, who were told the purpose of the study – to understand the experience of limited access to food – and were asked to identify households who were among the poorest in the area. These homes were then visited and the purpose and procedures of the study were explained to the female head of the household. We spoke with women because they are traditionally seen as in charge of feeding the household and making decisions about food use. As the aim of the study was to generate a comprehensive understanding of the experience of food insecurity in an urban setting we did not aim to obtain a random sample. Rather, we opted to interview members of a diverse set of households who were all poor. Households selected included nuclear families, female-headed households, individuals and couples who were HIV-positive, and elderly individuals. These households represented a diverse set of occupations (including the unemployed) and life history stages, but they were all materially poor as evidenced by the material from which the houses constructed (typically, wattle-and-daub walls, and tin roof), the belongings inside (e.g., a paucity of furnishings), and/or the respondents’ narratives about their livelihoods (“we live hand to mouth”). Despite their poverty, many households owned durable possessions such as radios, TVs, and mobile phones; these were frequently noted to have been purchased in the past, when prices were lower.

Rising food prices as experienced by households

Consistent with international and national estimates, all women reported an increase in the amount they were paying for a basket of core food items over the past 12 months (Table 1). All except for one item (onions) increased in price over the year, with an average increase of 2.0—2.6 times the previous year's prices. The price of teff, the primary ingredient of injera — a staple food in Ethiopia — increased by an estimated 40% over the previous year. Shiro, another food that has long been considered a staple of the poor, increased more than two-fold. The price of meat increased by nearly 50% — although, as the interviewees noted, the price was already high and meat was not frequently consumed by the poorest households. Coffee, sugar, and cooking oil were among the foods with the greatest increase in price (all >240%).

Food-based strategies for coping with food insecurity

Securing access to food or, more often, sufficient money to purchase food to feed oneself and one’s family was a consistent theme throughout the interviews (partly due to the design of the interview guide). A majority of respondents accessed food through wages earned through daily labor, or from money gained by household enterprises such as selling injera; none reported having access to their own land to produce. In the face of rising food prices, people in this sample changed the range of foods they consumed, the types of foods they were consuming as staples, and the frequency with which they were consumed.
In addition to worry about meeting family food needs, all but one respondent noted a range of ways that they reduced the quality of their diets, while hoping to stave off hunger either for themselves or their children. For example, several respondents noted that “we used to prepare many different types of foods” or “we used to eat everything” and that their current, monotonous diets led their children to become “bored of the same thing every day”. Meat and dairy products were frequently mentioned as items that were now frequently consumed including cooking oil, sugar, tea, coffee, and fruits or noted that they consumed these in much smaller amounts, or or noted that they consumed these in much smaller amounts, or were eating and then reduce how much they were eating. Reducing portions appeared to be a coping strategy reserved for people who would buy and use boqqollo was limited, it wasn’t that much. Mostly, it was the people from the rural areas who would eat boqqollo.

If you now go to the boqqollo stand, there are no boqqollo. If you go to the kocho stand, there is no kocho. People are fighting over it. You can’t even differentiate say so and so is rich, or so and so is poor; everyone is fighting over it. "Kocha, godare [a tuber], and boqqollo used to be the lowest of the lowest, the bottom foods of the poor. But now, thanks to God, even the rich are fighting their way in with us to get them. [Elderly woman, daily injera seller, rented house]

Fasting, or going hungry

Skipping meals was also mentioned explicitly by 11 respondents as a response to insecure access to food, with several respondents noting that when food runs out, “we just sit” or “we fool ourselves [that we’ve eaten]”. Others noted that they would consume breakfast, but not lunch, or lunch but not dinner, or dinner but not breakfast.

Seven respondents noted that they occasionally reduced their own consumption so that their children would have enough to eat. Some mothers noted that this happened so often that they themselves “no longer felt hunger.” In other cases children too were deprived: one respondent said that sometimes she was unable to give her children breakfast; another stated that she had to “snatch from my kids to pay the rent.” Less drastically, one mother had cut out snacks between meals for her children because there was not enough money to buy them.

Based on the frequency with which various strategies were mentioned and, in some cases, the order that strategies were explicitly mentioned, households appeared to first shift what they were eating and then reduce how much they were eating. Reducing children’s portions appeared to be a coping strategy reserved for only those in the direst situations.

Non-food based coping strategies

When household budgets are inadequate for procuring food, households may resort to special measures to obtain money quickly. People in this sample described a variety of coping strategies including spending their savings, liquidating assets, and borrowing.

Using savings

Most respondents (15/20) recognized the value of savings. As one pointed out: “Unless you have some money in the saving box, how can you, how can you live, I mean at this moment [when prices are so high]?” Others responded to the question of why one household might be food insecure while another was not by suggesting that the differences lay in savings; comments such as “The difference [between houses in food security] comes from one of them saving” were very common. Others pointed out that putting away money to save meant not having food now. “Even now, why would a person save money? They must eat on time!” Indeed, saving seemed rare or downright impossible for many families, given the already low incomes and the high prices of food, rent, and other expenses. “I do not save,” one woman said. “I never [even] had enough for my food.”

Selling assets

Selling clothes and other assets were frequently mentioned as a recourse for those without money. “Since I don’t have savings, every time I need something, I sell something [that I bought when times were better].” [65 years, female, unemployed]. Some reported, “selling my dress”, others a husband selling his shirt.

**Table 1**

<table>
<thead>
<tr>
<th>Item (unit)</th>
<th>n</th>
<th>Last yr (in Birr)</th>
<th>August 2011 (in Birr)</th>
<th>% Increase/decrease</th>
<th>SD of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onions (kg)</td>
<td>17</td>
<td>10.2</td>
<td>3.6</td>
<td>35</td>
<td>0.43</td>
</tr>
<tr>
<td>Teff (17 kg)</td>
<td>19</td>
<td>121.0</td>
<td>165.8</td>
<td>137</td>
<td>0.30</td>
</tr>
<tr>
<td>Meat (kg)</td>
<td>17</td>
<td>33.4</td>
<td>45.1</td>
<td>147</td>
<td>0.66</td>
</tr>
<tr>
<td>Butter (kg)</td>
<td>16</td>
<td>60.9</td>
<td>105.8</td>
<td>147</td>
<td>0.35</td>
</tr>
<tr>
<td>Lentils (kg)</td>
<td>14</td>
<td>13.8</td>
<td>24.5</td>
<td>178</td>
<td>1.74</td>
</tr>
<tr>
<td>Berberi (kg)</td>
<td>18</td>
<td>30.6</td>
<td>57.9</td>
<td>189</td>
<td>0.71</td>
</tr>
<tr>
<td>Wheat (17 kg)</td>
<td>16</td>
<td>77.1</td>
<td>152.9</td>
<td>198</td>
<td>0.69</td>
</tr>
<tr>
<td>Oranges (each)</td>
<td>8</td>
<td>3.4</td>
<td>7.0</td>
<td>206</td>
<td>1.94</td>
</tr>
<tr>
<td>Spinach (bunch)</td>
<td>19</td>
<td>2.1</td>
<td>4.4</td>
<td>210</td>
<td>1.74</td>
</tr>
<tr>
<td>Garlic (kg)</td>
<td>12</td>
<td>26.4</td>
<td>59.6</td>
<td>226</td>
<td>0.88</td>
</tr>
<tr>
<td>Shiro (kg)</td>
<td>19</td>
<td>91.5</td>
<td>210.1</td>
<td>230</td>
<td>1.74</td>
</tr>
<tr>
<td>Bananas (bunch)</td>
<td>11</td>
<td>3.7</td>
<td>8.7</td>
<td>235</td>
<td>0.98</td>
</tr>
<tr>
<td>Coffee (kg)</td>
<td>18</td>
<td>32.3</td>
<td>77.4</td>
<td>240</td>
<td>1.46</td>
</tr>
<tr>
<td>Sugar (kg)</td>
<td>14</td>
<td>12.9</td>
<td>31.1</td>
<td>241</td>
<td>1.08</td>
</tr>
<tr>
<td>Cooking oil (1 L)</td>
<td>18</td>
<td>18.4</td>
<td>52.0</td>
<td>283</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Note: In August 2010, the exchange rate of Ethiopian Birr was 17 to 1 US dollar. Sample size varies because some women reported that they did not know the price of the item.

* Teff — local grain staple, indigenous to Ethiopia. Shiro — chickpea-based condiment, sold in powder form; berberi — chili powder.

Reduced dietary diversity

In addition to worry about meeting family food needs, all but one respondent noted a range of ways that they reduced the quality of their diets, while hoping to stave off hunger either for themselves or their children. For example, several respondents noted that “we used to prepare many different types of foods” or “we used to eat everything” and that their current, monotonous diets led their children to become “bored of the same thing every day”. Meat and dairy products were frequently mentioned as items that were now included, e.g., “We used to eat meat and butter a lot more, but now we barely eat meat once every 15 days or so since it has reached 50 birr [per kilogram].” Others noted specific items that they no longer consumed including cooking oil, sugar, tea, coffee, and fruits – or noted that they consumed these in much smaller amounts, or less often than before. At the time of this research, vegetable oil was particularly difficult to obtain. Long lines of people holding empty oil containers were frequently observed during the summer of 2011 in Jimma, and several people described “cooking without oil” or how they often ate leafy greens without oil, which was “disgusting.” Another dietary theme was shifts in recipes, such as adding corn or millet to teff when making injera.

“Poor people’s foods”

When people described the foods they were now consuming because of high prices, there was considerable overlap with the foods they listed when asked to provide examples of “poor people’s foods”: foods that were considered nutritionally or culturally inferior. These foods included gomen (spinach), kita (homemade wheat bread), gollo (roasted grains), and kocho (false banana root, associated with the Gurage ethnic group). This suggests a shift to lower quality or less preferred foods; this theme was mentioned by 15 of the 20 respondents. These foods were “despised” by wealthier community members, who might ask, “Don’t you get tired of eating the same foods?” or claim that spinach, kocho, and bread are the “permanent companions of the poor.” One woman described how foods previously consumed only by the rural poor were now more widely consumed:

Well, at this point I do not [think you can point to] anything that the poor [alone] will use. In the past, nobody would buy from the kocho [root of false banana tree] stand. Nobody would touch it... And if you went to the boqqollo [corn] stand, the number of

[...remaining text...]

C. Hadley et al. / Social Science & Medicine 75 (2012) 2412–2419

2415
Borrowing

Another widely used reversible coping strategy mentioned by all but one respondent was borrowing from friends, neighbors, merchants (including those who run the grain mills), and relatives, or (for HIV + respondents only) NGOs. Respondents varied in their attitudes to borrowing, with some being very afraid of debt – “I won’t borrow. I think of it as death; I am scared of borrowing.” Others were ashamed to take a loan, while others were far less concerned, and some noted that they would take loans for food but nothing else: “No, we don’t buy other things [apart from food] with loans. If we can’t afford them, we don’t buy them [laugh]. But your stomach doesn’t give you that kind of luxury of time [laugh].” When asked if she had ever borrowed for food, another participant replied, “Yes, yes, by God. I borrowed many times.”

Within our sample there was variation between households in the ease with which they could obtain loans. Some women in the interviews explained that they had no problem borrowing because “they know that I will pay when I get money, they let me borrow” and could go from “one store to another” getting food and grains on credit. Others suggested borrowing was difficult. One respondent, who wanted to borrow to get money for meat, said, “It’s not like they [lenders] will let me borrow right away anyway, if I just up and ask for loans.” Few mentioned paying loans back, except in the context of yet another thing that one had to pay for each month or as a reason not to take a loan in the first place, as illustrated by this statement: “I don’t have anything to eat. How would I pay back a loan from someone?” [Elderly woman, daily injera seller, rented house].

Other coping mechanisms

Other coping mechanisms, mentioned each by fewer than five respondents, were sending children to live with others, relying on remittances or income assistance from grown children, and begging. Some respondents said they knew of people who were driven out of desperation to steal or to resort to prostitution in order to raise money for food, as indicated by this respondent: “Just to cover their daily food, they are meddling with unlikely people on the streets [engaging in prostitution]” [~ 50 years, female, hotel cleaner].

Effects of the food crisis on community cohesion

The rising price of food was linked to alterations in normative social gatherings around food in three different domains: providing food for funerals, sharing meals, and holding coffee ceremonies.

Funerals: sharing food with the bereaved

“Starting from time immemorial, our culture is you prepare food and take it to [the home of the deceased]”

Births, weddings, and funerals are occasions on which people in Ethiopia customarily bring food to the homes of the families concerned. Of these occasions, the one for which the social pressure to contribute food is highest is the laqso (funeral or mourning ceremony; literally “weeping”). Under the recent circumstances of rising food prices, however, this custom appears to be declining. Half of the respondents collectively described three options that they faced in relation to funerals, given their food insecurity: (1) not attending; (2) attending for a shorter time; or (3) reducing the amount of food they gave to the family of the deceased.

Several respondents described how they no longer participated in funerals at all because they feared that they would not be able to contribute adequately.

I swear to God, I failed to go to three people’s houses [during funerals]. They are my neighbors. Because I don’t have the means, the contribution is … [too] high. [Elderly woman, daily injera seller, rented house]

Others reported that they were providing food for shorter periods:

In the past, we used to bring dinner to the house and keep bringing food during the following days until the family was done mourning. We used to go for both lunch and dinner. [Elderly female, unemployed, husband receiving retirement stipend]

When asked why this practice had become infrequent, the interviewee replied that it was “because of shortage of ihil [grain].”

While one respondent said that social eating would continue in spite of the rise in food prices, “because there are [always] laqso;” others compared the high levels of participation in the past with the comparatively low levels of today:

In the past, no one would be absent if someone’s relative died. We would prepare [food] two or three times, eat, make and drink tea, make coffee, and leave. Now, we cannot do all of those. It is impossible.

Failure to attend funerals has been reported elsewhere in Ethiopia in relation to water insecurity: In water-stressed communities in rural Amhara, absence from funerals was described as a source of shame (Stevenson et al., 2012).

Food sharing

“Eating together is a thing of the past.”

According to custom, Ethiopians routinely share both meals and small amounts of foodstuffs (such as cooking oil, sugar, and coffee beans) with their neighbors. Eleven respondents in our sample explicitly reported declines in routine sharing of this sort: In the wake of the rise in food prices, one woman said, neighbors “do not share the little cup of oil they have.” Another woman concisely described the decline in social meals: “In my experience, there is no more inviting each other to share a meal.” [~ 40 years, female, hotel cleaner]. This shift away from wide-scale sharing was contrasted with “the past” when people shared food with each other more often. One woman recounted how her father “used to share wheat … with the neighborhood” but noted that no one did anything like this any more. Another pointed out that although she would share her food with someone who “unexpectedly” came to her home while she was eating, eating together was “nothing like in the past, where I would call someone walking on the street to come in and eat” [65 years, female, living off of children’s contributions].

Reluctance to share food with others extended to relatives according to one respondent, who noted,

Even relatives resent each other because of living expenses. No one … wants a family member to move in and be taken care of. [~ 40 years, female, day laborer]

One woman claimed to share food with others despite her poverty, stating that if “there is gomen [spinach] or kitta [bread] in my house, I share with them and eat” [~ 40 years, female, day laborer]. This view was, however, not widely represented in the interviews.

One highly ritualized form of sharing among neighbors in the Ethiopian context – the coffee ceremony – deserves special mention.
Coffee ceremonies

“The price of coffee is killing us."

The Ethiopian coffee ceremony is a highly ritualized activity that involves roasting, grinding, and brewing coffee, and consuming it together with small snacks such as popcorn, injera, bread, or qollo (roasted grains) (Pankhurst, 1997). Incense is often burned at the same time. During the coffee ceremony, neighbors and friends come together to share stories and news, almost always in someone’s home. As one respondent put it, “Coffee ceremonies allow you to meet with people daily,” or another: “In Ethiopia, coffee brings people together.”

In the wake of the rise of food prices, the coffee ceremony as an institution is apparently being threatened, at least among the urban poor, with a decline in the frequency of ceremonies and in the numbers of people participating in any given ceremony. More than half of the respondents expressed sentiments such as “We don’t invite each other for coffee like we used to in the past,” or, “We used to invite each other in the daytime but coffee has become so expensive now so it is hard to drink that much.”

“Earlier, we used to make coffee [and drink together]. Now three birr [worth of] coffee is just enough for two people to drink two 
\[a spicy leaf]\] each. Earlier ... we [would] call all the neighbors with a blow horn (loud speaker), make injera available, spray pepper on it, make our kitta snacks and eat. But now, nobody invites anyone else.” [Elderly female, unemployed, husband receiving retirement stipend]

Others noted that emblematic pieces of the coffee ceremony were being dropped from the routine because they were too expensive. One respondent who still consumed coffee with a fairly large number of neighbors noted that they were no longer purchasing snacks or incense to accompany the ceremony and they were meeting for coffee only “once every week or two,” rather than “three times a day, like we did in the past.”

As they did with food, people deployed a number of strategies to smooth or maintain their coffee consumption, even if it was consumed in private or with their immediate family members or children. Several would make coffee in the morning and “then reuse the same [grounds], heat [them] up and drink [coffee] again during the day.” Another respondent stated that she would “heat up the [coffee a] second time, add salt, and put in tena adam [a spicy leaf]” to flavor it. Notably, however, these were measures taken when coffee was consumed alone, rather than when it was prepared for guests.

When asked why they would take such steps, responses were almost always the same: “Because of high living expenses.” “It is so expensive,” one woman elaborated:

“One small cup [of coffee beans — enough for brewing one pot of coffee] is sold for four Birr. How can one bear this price?” [55 years, female, day laborer, HIV+]

Competing demands

One response to high food prices is to reduce spending on other commodities. Respondents varied in their inclinations in this regard, with some stating that they would prioritize other expenses over food. For others food was valued but so were a limited number of other non-food items. Difficult decisions about how limited funds were to be used were evident throughout the transcripts.

Clothes

The most common priorities to compete with food purchases were clothes and laundry detergent. Especially prioritized were clothes for children. “According to my means, I will go and buy [clothes] for him [my son], foregoing my breakfast and lunch for today,” one woman said [27 years, female, unemployed]. Another explained that she would forgo food to purchase soap for washing clothes, emphasizing that a neat and clean appearance had a larger impact on how she was perceived than did having an empty stomach.

Others were critical of the practice of trading off food purchases against clothes. “There are some,” one woman said, “who [save money to] buy a natala [shawl] and die [of hunger] before wearing it.” Another woman encapsulated her perspective on the tradeoff between hunger and buying clothes pithily:

_Hod kabad new. Lebs qalal new._

(“Stomach [i.e., hunger] is really tough [lit. heavy]. Clothing is easy [light].”) [Elderly female, unemployed, husband receiving retirement stipend]

Televisions

A larger purchase that some families saved money for was a television. The rationale for buying a television was expressed by one woman in terms of competitive consumption: “If a TV exists in one home, then they [the neighbors] would say, why not in ours?”

The same woman also noted that while she was saving to buy a television,

I realized that I was starving myself to death. [Then] I withdrew or cashed all my savings, and fed myself. Why should I buy a TV, if I am killing myself? [55 years, female, daily laborer]

Less frequently mentioned commodities competing with food purchases (nominated by fewer than five people each) were khat and various household goods (e.g., soap, furniture, bedding).

Perceived health consequences of insecure access to food

Respondents were asked about and reported a range of mental and physical health consequences of food insecurity. The most frequently reported consequence of food insecurity (19/20 respondents) was “stress”, as in, “Well, there is stress over what we are going to eat from meal to meal, if we can afford it at all. This creates a lot of mental stress for us” or, “[Food insecurity] causes a lot of stress because you’ll constantly [be] thinking about where and how you will get your next meal.” Another noted, “There is nothing else that stresses me out as much [as not having enough food].” Stress was also generated by competing demands, for example when households were unable to send their children to school because they needed the funds to secure food. And, stress was reportedly generated by the shame of not being able to provide enough food for children; several reported the shame and stress they felt when their children went to neighbors to ask for food. Another reported that she “leave[s] through the back door” to avoid having to see her neighbors. Still others worried about having enough food and having enough of the culturally-correct foods, as indicated here: “I worry about what I will eat, what my children are going to eat. I worry about how I’m going to explain to my son why he can’t have what some of the other kids can have if he gets jealous.” [27 years, female, unemployed]

Stress manifested as weight loss, sleep loss (due to worry) and worrying about children and neighbors’ perceptions. Malaria, general weakness, diarrhea and a host of other issues were also mentioned, but by fewer than five participants each, as consequences of food insecurity. Respondents often provided broad statements, like “[food insecurity] makes you weak since you won’t have any energy. It also causes diarrhea, vomiting, weight loss and general worsening of the body.”
Discussion, limitations, and relevance

The rise in food prices since 2007 has led to a tremendous increase in interest in global food in security (Barrett, 2010; Dessus, Herrera, & de Hoyos, 2008; Naylor & Falcon, 2010; Wodon et al., 2008; Zezza et al., 2008). A recurring question in much writing on the crisis is who was most affected by the food price increases (Swinnen & Squicciarini, 2012). Many of the attempts to answer this question have focused on “hard” outcomes, such as the caloric declines experienced by people or the reduction in children’s weight for age (Compton et al., 2010; Ivanic & Martin, 2008; Naylor & Falcon, 2010). Work on the crisis has also called attention to the potential differential impact on the urban poor (Ruel, Garrett, Hawkes, & Cohen, 2010). Further, some of these have been simulation studies, relying on projections using pre-crisis data. To quote Heady and Fan (2008, p. 18), these “simulations tell us who would be vulnerable to rising prices, but not which populations are actually experiencing hardship as a result of rising food prices”. Our own studies from this same setting have also shown that food security, particularly among the urban poor, appears to decline as market prices increase (Hadley et al., 2011). Although the sample we used is not ideal, we have aimed here to complement existing studies on food price increases to examine the multiple ways that rising food prices impact household households.

Because this study included only poor households, the extent to which wealthier households are experiencing the same shifts in everyday practices is unclear. Furthermore, it is not entirely clear the extent to which declines in redistributive practices actually impact health and well-being, but it is plausible that they may reduce social cohesion, increase loneliness, and contribute to declining well-being. Interviewing men as opposed to women may have led to different conclusions and would be an interesting area for future research.

Neither simulation studies nor those using quantitative food insecurity tools offer a full account of what hardships people endure. Our study brings a holistic anthropological perspective to address both of these points. It expands our understanding of the many ways that the recent rises in food prices have impacted on the everyday lives of people living in poverty, and it relies on respondent’s voices to explore the impacts of the rise in food prices on individual well-being and community cohesion. These data indicate quite clearly that rising food prices were associated with a decline in dietary quality and quantity, and led respondents to engage in a range of food and non-food based coping strategies. These results also highlight the impact of higher food prices on communal activities, such as coffee ceremonies and funerals.

The results from this work confirm that of others, especially as it relates to the shifts in dietary practices that occur in the face of food insecurity. As many others have shown (Coates et al., 2006; Shipton, 1990), these include shifts in the amount of food consumed, the types of foods consumed, along with shifts in who receives food, and who foregoes food. Most respondents were able to clearly articulate a set of responses that were consistent with food insecurity as a “managed process” and existing literature on food-based coping strategies. This begins with the inclusion of “poor people’s foods” into the diet and culminates in missed meals and feelings of outright hunger. Others noted that when food insecurity was particularly severe they reduced their own intake, and ultimately their children’s. This process would, ultimately, lead to a reduction in caloric intake and, presumably, micronutrient deficiencies if continued for a long period of time.

A second implication of this work is that it reaffirms a close correspondence between the experience of food insecurity and contemporary tools used by researchers and practitioners to measure food insecurity (Swindale & Bilinsky, 2006; Webb et al., 2006). Researchers are increasingly utilizing experience-based tools to measure food insecurity and there has been some debate in the literature about the extent to which behaviors in these scales are universal. Our results, like others, suggest that there are universal coping strategies and these map on very closely to current tools, such as the Household Food Insecurity Access Scale (HFIAAS) or the more recent Household Hunger Scale (Deitchler, Ballard, Swindale, & Coates, 2011). This suggests that these tools may be applicable in a range of circumstances, including the assessment of short-term economic shocks.

Third, consistent with other recent studies (Nanama & Frongillo, 2011; Tsai et al., 2012; Weaver & Hadley, 2009), our work reaffirms that insecure access to food appears, at least in the minds of respondents (and increasingly confirmed by epidemiological studies), to impact on a range of health and well-being outcomes that extend beyond nutritional status. For instance, respondents in our study cited the nutritional consequences of food insecurity, but also impacts on mental health, chronic diseases, as well as prostitution, kin relations and crime; the latter are not yet well studied in the Ethiopian context.

Many of the dietary shifts that people reported suggest that one way that food insecurity may impact on people’s well-being is by compelling people to consume foods that are perceived as socially inferior, and by preventing people from consuming foods commensally or engaging in rituals where food plays a central role. This is consistent with emerging work that strongly suggests that the stress of food insecurity comes in part from disallowing people to engage in food-based cultural rituals. Semi-structured studies in several settings have documented the associations between food insecurity and loneliness, anxiety, worry, depression, shame, and disruptions of household economies and relationships. For instance, the pioneering work of Radimer et al. (1992) documented the pervasive worry that uncertain access to food infused into households. More recently Hamelin et al. (2002) found that Canadian women made clear links between food insecurity and concerns about perceived social status, alienation and guilt, and concern that they were unable to participate in meals and holidays in culturally acceptable ways. Findings linking food insecurity to stressful but non-nutritional outcomes have also been reported in low-income settings. In a study of rural households in Burkina Faso, for example, food insecurity was associated with alienation, shame, and increased conflict within households (Nanama & Frongillo, 2011). Closer to the current study area, Amare (2010) has provided a rich account of food insecurity in Addis Ababa, Ethiopia following the 2008 food price increase, including disrupted social relations and non-nutritional consequences including threats to mental health. That our results are largely convergent despite examining a different phase of the food crisis, and a different urban center in Ethiopia, suggests a central role of food prices on the food security experiences of the urban poor.

The extent to which food insecurity is stressful may depend on social support (Kollannoor-Samuel et al., 2011; Tsai et al., 2012). One of the results to emerge from our study is a detailed description of the deterioration of sharing networks and communal consumption during times of rapidly rising food prices. Our results show that at least among the poor, sharing networks appear to have been suffering from the magnitude and scope of the shock. This is consistent with the idea of covariant risk, when a large population jointly experiences a shock, which renders horizontal sharing networks less effective (Devereux, 2001; Hadley, Mulder & Fitzherbert, 2007). These declines appear to be occurring not simply in between-individual sharing but also in ceremonial or institutional sharing, as evidenced by the data on funerals and coffee ceremonies. As Shipton (1990, p. 368) notes, “ceremonial and other redistributive exchanges are insurance investments, too...”. It
is not entirely clear the extent to which these potential declines in redistributive practices impact health and well-being, but one could theorize that they reduce social capital, increase food insecurity, and contribute to declining well-being. It is also not clear, because of our sampling strategy, the extent to which wealthier households are experiencing the same shifts in everyday practices but if they are not as affected then the predicted result would be an increase in several dimensions of inequality, including health and wealth. This may explain why the respondents in our interviews tended to have fairly negative opinions of the wealthier people in their communities and clearly indicated that the poor received very little help from those better off. This is consistent with broader theorizing about the impact of the food crisis on inequality (Naylor & Falcon, 2010) and an issue that we will explore in a future analysis.

Our results are also consistent with anthropological theory that links local experiences of food insecurity to political economic factors (Leatherman, 2005) and data on coping strategies in the face of food insecurity. These similarities suggest that, despite differences in time, place, and reason, rising food prices likely force people to enact a fairly universal set of behaviors, although the way these play out will be conditional upon local environments. Further, the impacts are likely to manifest not only in nutritional status, but also in terms of mental health and a generalized decline in sharing and communal eating. In the context of food crisis, therefore, food insecurity measures that consider only nutritional measures such as caloric intake may be measuring only the tip of the iceberg in terms of human suffering. To capture the impacts of food crises clearly, multiple methodological and theoretical perspectives are required. Our aim here has been to add one more perspective on the impacts of food price increases on urban food security. Recognition of the many facets of the lived experience of food insecurity in the context of rising food prices should make action to protect the poor all the more urgent.

Acknowledgments

EGJS was supported during analysis and writing in part by NIH/ FIC grant #1R24TW008825-01. We are grateful to the people in Jimma who shared their experiences with us. We extend thanks to Ayelech Getachew and Mahdi Ibrahim for their assistance with interviewing and translation. We also acknowledge the Workshop on Food Insecurity and Mental Health and participants for inspiration (NSF # 1029058).

References