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Features of Urban Food and Nutrition Security and Considerations for Successful Urban Programming

Marie T. Ruel and James L. Garrett
International Food Policy Research Institute
2033 K Street, N.W., Washington DC 20006
m.ruel@cgiar.org

Abstract

In this paper we discuss the wide disparities that exist in childhood malnutrition, food insecurity and livelihoods within urban areas which, when combined with the mobility of urban residents, add to the complexity of designing, targeting and implementing urban programmes. Livelihood security in urban areas is dependent on cash income, especially for food expenditures, and hence employment. For women, employment brings about the need for support with childcare; we analyse a programme that provides the double benefit of delivering affordable and reliable childcare for extended hours, and allowing women to secure a more formal employment and obtaining employment benefits. Other factors that need to be considered in shaping urban programmes include land and housing security, the crime and violence situation, the availability and nature of social networks, and governance issues. Finally, we discuss potential strategic responses to the challenges of urban programming.

Keywords: *urban food security, food expenditures, employment, childcare, urban programming*

1. Introduction

This paper updates our earlier reviews of urban food and nutrition security (Ruel, Haddad and Garrett 1999; Ruel et al. 1998.). These earlier pieces reviewed existing knowledge from published literature concerning the unique characteristics of urban food and nutrition security and their determinants, and experience of successful programme and policy responses to alleviate urban food insecurity and malnutrition. The reviews also identified key research gaps.

The present review focuses more on what we have learned on these issues from five years of empirical research and through our collaboration with partners directly involved in the design and implementation of urban programmes in the field. CARE International and some of their country offices have been our main partners to date, and we have also collaborated with the Government of Guatemala in the evaluation of a community day care programme. Our research programme combined primary data collection in a number of countries and secondary analysis of data from the Demographic and Health Surveys (DHS) and the World Bank Living Standards Measurement Surveys (LSMS).

The paper is structured as follows. First we present new information from our empirical research on urban/rural differences in food security and child nutritional status, and on socio-economic differentials within area. Then some of the unique features of urban food security and its determinants are highlighted. The paper concludes with a discussion of lessons learned and implications for urban programming.

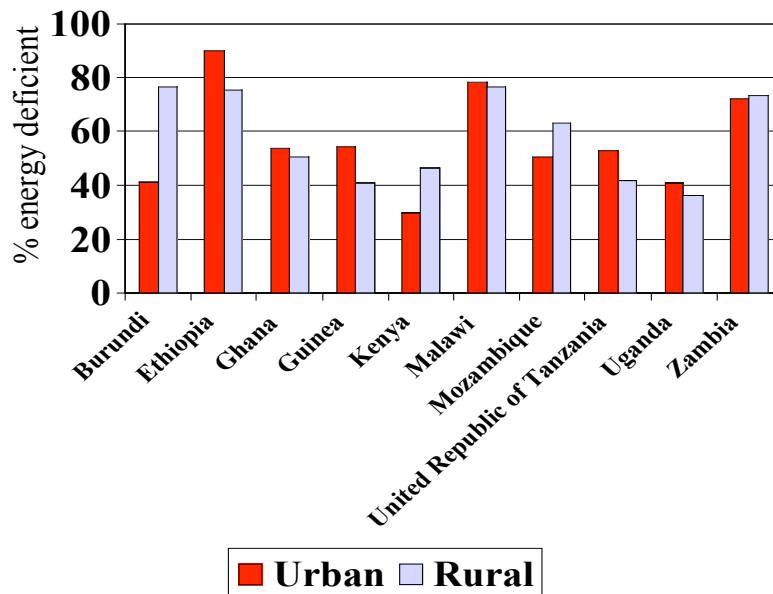
2. Urban/Rural Differences in Food Security and Child Nutritional Status

This section updates the empirical evidence concerning urban/rural differences in food security and child nutritional status, using newly available data sets from several developing countries.

Urban/rural differences in food security

Quantitative data on urban food security are scarce, but a recent analysis of nationally representative consumption/expenditure surveys from ten African countries provides useful insight (Smith and Aduayom 2003). Figure 1 presents an estimate of the percentage of the population who are energy deficient by urban/rural area (see also the Annex for more information about methods used and results). Contrary to expectations, the percentage of the population found to be energy deficient is higher in urban areas in six of the ten countries studied. In all countries except Kenya and Uganda, at least 40 percent of the urban population is energy deficient; with percentages reaching 90 percent in urban Ethiopia and 76 and 72 percent in urban Malawi and Zambia, respectively. However, because Africa is not yet as highly urbanized as other regions, the absolute numbers of energy deficient people in rural areas still exceed the numbers in urban areas. Nevertheless, the urban population is currently contributing a significant proportion to the total number of energy deficient individuals – more than a third in four of the ten countries studied (Zambia, Ghana, Guinea and the United Republic of Tanzania, by descending order). Similar analyses are currently ongoing for several Latin American and Asian countries. We expect that the findings will differ substantially between regions and countries depending on their stage of urbanization.

Figure 1: Urban/rural differences in food insecurity (percentage energy deficient individuals) in sub-Saharan Africa



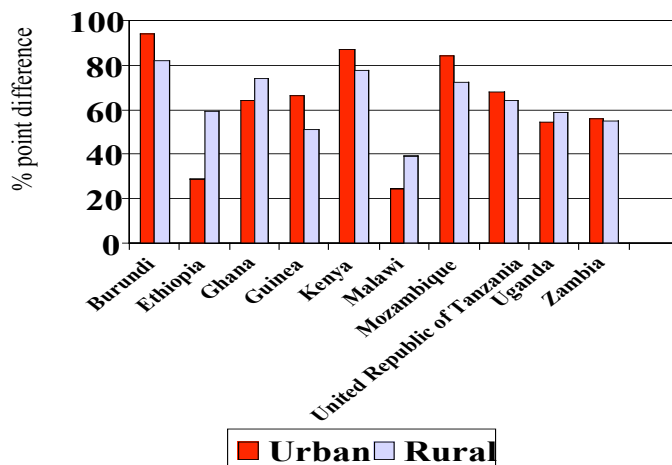
Source: Smith and Aduayom 2003.

It is important to note, however, that the methodology used to derive the statistics presented here on the numbers and percentages of energy deficient individuals does not take into account potential differences in energy expenditures (and therefore requirements) between individuals living in urban and rural areas. Typically, individuals living in rural areas have higher energy requirements because they tend to have more physically demanding employment such as farming, and they also may need to walk long distances to and from their place of work. Household chores may also require greater energy expenditure, especially to fetch water and/or do the laundry. Although there is clearly a good proportion of urban dwellers who may also have high energy expenditures, also from physically demanding employment and travel, on average it is believed that urban dwellers tend to live a more sedentary life, especially in countries experiencing rapid economic growth (Popkin 1994; Popkin and Doak 1998). Therefore, failure to account for differences in energy expenditure/requirements in the urban/rural comparisons presented here is likely to underestimate the true prevalence of energy deficient individuals in rural areas. These findings should thus be interpreted with caution.

Considering the caveat described above, a potentially more useful comparison is to look at the magnitude of socio-economic differentials in food security within urban and within rural areas. The differences (in percentage points) in the percentage of energy deficient individuals between the lowest and the highest income quintile within each area are presented in Figure 2. If we take the example of the first country, Burundi, the first bar shows for the urban sample the percentage point difference in the proportion of food insecure individuals between the lowest income quintile compared to the highest income quintile. The next bar (still for Burundi) gives the same information, but for the rural sample. So, in the case of Burundi, the socio-economic differentials in food insecurity are larger in urban compared to rural areas, but this is not the case for all countries. In fact there are no clear patterns emerging in the magnitude of the socio-economic differentials between urban and rural areas; in some countries differences are wider in urban areas, whereas in other countries they are wider in rural areas and yet in others, the differences are very small and insignificant. Overall, socio-economic differentials are very large – often larger than 60 percentage points – both in urban and rural areas.

Figure 2: Socio-economic differentials in food insecurity by area of residence (sub-Saharan Africa)

Percentage point difference between the lowest/highest income quintile



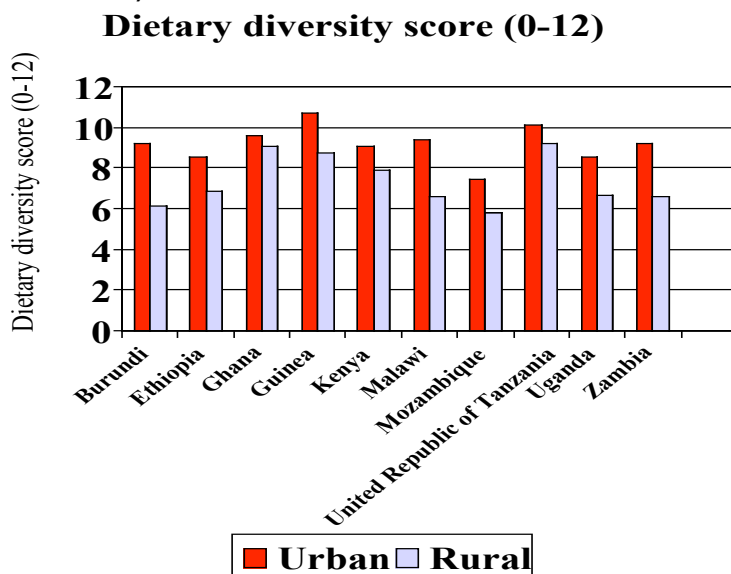
Source: Smith and Aduayom 2003.

Household dietary diversity, defined as the number of foods or food groups consumed by households over a reference period, has been recently shown to be strongly associated with household consumption/expenditure and food security in a multicountry analysis (Hoddinott and Yohannes 2002). This research was based on the premise that as income increases people tend to diversify their diet, largely because greater variety makes diets generally more palatable and more pleasant. Diversity also significantly improves dietary quality and the likelihood that individuals will meet their daily nutrient requirements, especially with regard to essential micronutrients. Therefore greater dietary diversity is highly desirable, both from a quality of life and a dietary quality point of view, and appears to be a good proxy for household income/expenditure and food security.

Thus, using the same set of African countries listed in the Annex, Smith and Aduayom (2003) computed a household dietary diversity score using the methodology developed by Hoddinott and Yohannes (2002), which measures diversity at the household level, using 12 food groups.¹ Findings are presented in Figures 3 to 5. Dietary diversity was consistently higher in urban compared to rural areas (Figure 3), but in many of these countries (especially Kenya, Mozambique, Uganda and Zambia), the urban poor had dietary diversity scores as low as the rural poor (see Figures 4 to 5). Socio-economic differentials (again comparing households from the lowest and the highest income quintiles) were generally large in both urban and rural areas, but there were no obvious differences in the magnitude of these differentials between urban and rural areas. Consistent with the findings from Hoddinott and Yohannes (2002), dietary diversity seemed to be strongly associated with income, and in the set of countries from sub-Saharan Africa used here, the association was generally linear (not shown).

¹ This study adopted the 12 food groups used by the Food and Agriculture Organization of the United Nations (FAO) food balance sheets.

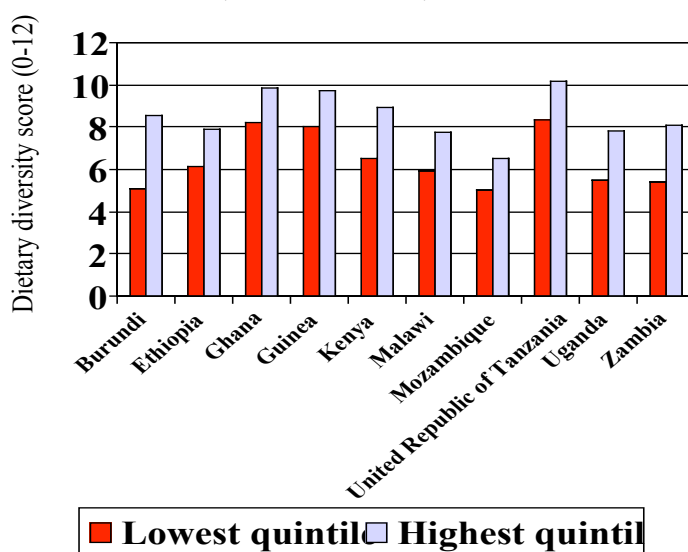
Figure 3: Urban/rural differences in household dietary diversity (sub-Saharan Africa)



Source: Smith and Aduayom 2003.

Figure 4: Socio-economic differentials in household dietary diversity (sub-Saharan Africa)

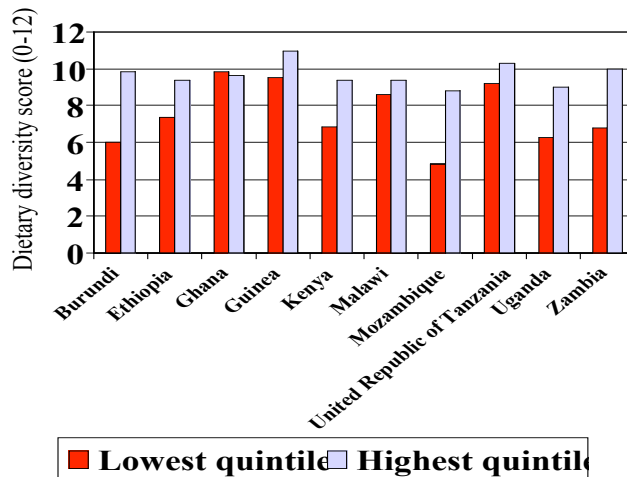
**Difference between the lowest and highest quintile
(Rural areas)**



Source: Smith and Aduayom 2003.

Figure 5: Socio-economic differentials in household dietary diversity (sub-Saharan Africa)

Difference between the lowest and highest quintile (Urban areas)



Source: Smith and Aduayom 2003.

3. Urban/Rural Differences in Child Nutritional Status

Global statistics on child nutritional status could not be more consistent in showing that urban children are better nourished than rural children. No matter which country or sets of countries are analysed, the prevalence of undernutrition among urban children is consistently lower than among rural children (Ruel et al. 1998; Ruel 2000; Ruel 2001b; Smith, Ruel and Ndiaye 2003; National Research Council 2003; Menon, Ruel and Morris 2000; Garrett and Ruel 1999b). This is particularly true for stunting (low height-for-age)² and for underweight (low weight-for-age). Urban/rural differences in stunting are generally of smaller magnitude in Africa and Asia compared to Latin America, where differences of up to twofold are observed (Ruel et al. 1998; Ruel 2001b).

Urban/rural differences in wasting (low weight-for-height) are less consistent. Although generally lower in urban areas, the prevalence of wasting is often similar in urban and rural areas and, when they exist, they tend to be of small magnitude (Ruel et al. 1998; Ruel 2001b; National Research Council 2003).

Figure 6 shows results from a pooled analysis of 36 data sets from the Demographic and Health Surveys (DHS) from three regions: South Asia (SA), sub-Saharan Africa (SSA) and Latin

² Stunting, or linear growth retardation, is an indicator of long-term chronic undernutrition. Stunting is defined as height-for-age lower than -2SD from the median of the CDC/WHO reference population (WHO 1979). Wasting, an indicator of short-term, acute undernutrition, is defined as weight-for-height lower than -2SD from the median of the reference population. Underweight, a global indicator of undernutrition, which does not differentiate between stunting and wasting, is defined as weight-for-age lower than -2SD from the median of the reference population.

America and the Caribbean (LAC)³ (Smith, Ruel and Ndiaye 2003). These pooled data confirm previous findings of lower stunting rates in urban compared to rural areas, and larger urban/rural differences in stunting in the LAC region than in the other two regions.

Yet global comparisons can be misleading ...

Clearly, global comparisons such as the ones presented above are misleading because they hide the wide disparities that exist within areas. Socio-economic differentials are particularly large in urban areas, and therefore central statistics reporting overall rates of undernutrition may be deceiving.

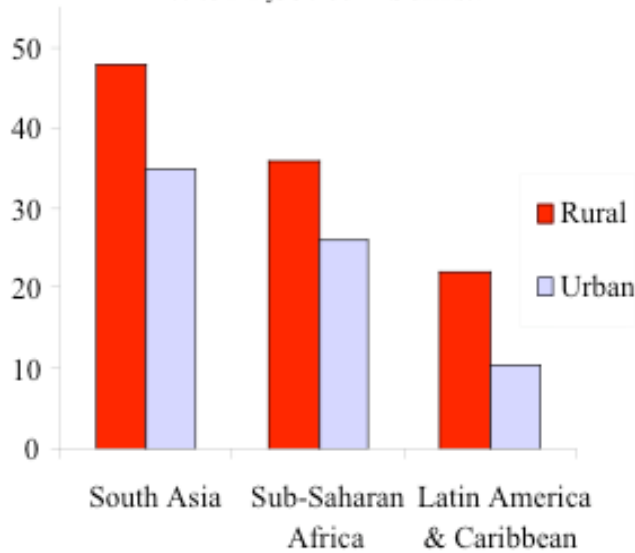
Research by the International Food Policy Research Institute (IFPRI), using DHS surveys from 11 countries from three regions, specifically tested the hypothesis that socio-economic, intra-urban differentials in child stunting were greater than intrarural differentials⁴ (Menon, Ruel, and Morris 2000). The analysis clearly showed that across these countries: i) there are large socio-economic differentials in childhood stunting; ii) these differentials are commonly greater in urban than in rural areas (see Figures 7 and 8); and iii) the most disadvantaged urban children have rates of stunting that are on average only slightly lower than those of the most disadvantaged rural children. In order to quantify the magnitude of urban/rural and socio-economic differentials in stunting, we computed odds ratio⁵ (e.g. the odds of being stunted for children in rural compared to urban areas; or the odds of being stunted for children from low- income versus higher-income families). Results for the 11 countries analysed showed that odds ratios for urban/rural comparisons were relatively small (<3.3), indicating that the risk of being stunted for children living in rural areas of the countries studied is <3.3 times greater than for children living in urban areas. The gap between the lowest and highest socio-economic status (SES) quintile in urban areas, however, was much larger (ranging from 2.8 to 10.2) than between the lowest and highest SES quintile in rural areas (all <3.3 except Brazil). The risk of being stunted among poor children was up to ten times higher than for the wealthiest group in two urban areas of Latin America (Peru and the Dominican Republic). The fact that such strong socio-economic gradients are consistently found in urban areas of developing countries implies that reliance on global average statistics to allocate resources between urban and rural areas could be dangerously misleading, a point originally made in the late 1970s (Basta, 1977).

3 This analysis uses data from 36 of the most recent DHS conducted between 1990 and 1998 in three regions: South Asia (SA), sub-Saharan Africa (SSA) and Latin America and the Caribbean (LAC). Eighty percent of all SA countries, 58 percent of SSA countries and 36 percent of LAC countries are included. The sample included 129 351 children under three years of age and 117 007 women, usually their mothers.

4 In this study, a socio-economic status (SES) index was derived from data on household assets, housing quality and availability of services. The index was created separately for urban and rural areas of each country, using principal components analysis (11).

5 Odds ratio were used to assess the magnitude of urban/rural differentials in childhood stunting, as well as within-urban and within-rural socio-economic differentials. The latter were computed by comparing the lowest SES quintile group with the highest quintile group. Odds ratio were computed using the following formula: $[p/(1-p)]/[q/(1-q)]$, where, for the urban/rural comparison p is the proportion of stunted children in rural areas and q is the proportion of stunted children in urban areas. For more information, see (11).

Figure 6: Stunting prevalence across urban and rural areas, by region
 Pooled analysis of 36 DHS data set

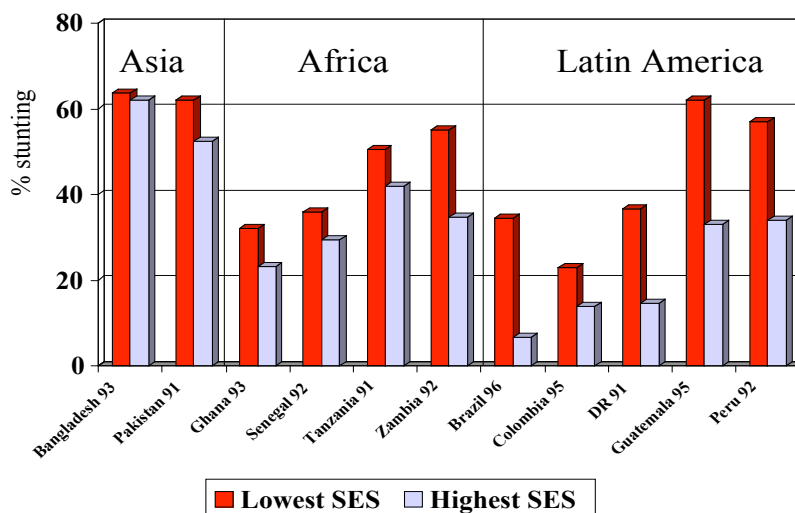


Source: Smith, Ruel and Ndiaye 2003.

An additional concern for countries undergoing rapid economic and nutritional transitions is the rising prevalence of overweight and obesity among children. This topic, however, is addressed in this publication by Popkin and collaborators.

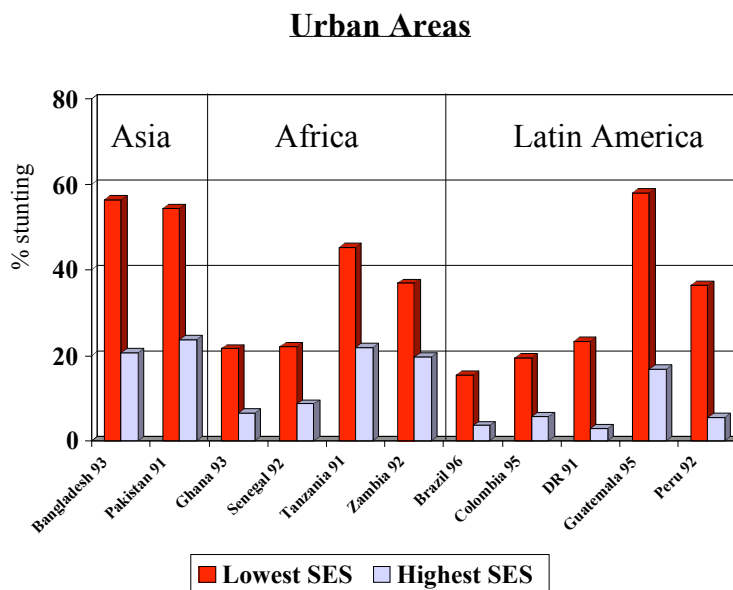
Figure 7: Prevalence of stunting by socio-economic status (SES) quintile (DHS)

Rural Areas



Source: Menon, Ruel and Morris 2000.

Figure 8: Prevalence of stunting by socio-economic status (SES) quintile (DHS)



Source: Menon, Ruel and Morris 2000.

4. Why are urban children better off nutritionally, compared to rural children?

The empirical analysis described above provides irrefutable evidence that overall, urban children have a better nutritional status than their rural counterparts, and especially so with regard to linear growth (stunting). A question that arises then, especially in view of the evidence concerning the high rates of urban poverty and food insecurity, is why are urban children better off than rural children? We examined this issue, first with a nationally representative sample from Mozambique and then through a multicountry pooled analysis of DHS data sets from 36 developing countries (Garrett and Ruel 1999a; Smith, Ruel and Ndiaye 2003). The main question that was addressed in both studies was whether the socio-economic determinants of child nutritional status differed across urban and rural areas. The socio-economic determinants examined were maternal education and maternal status (only in the multicountry analysis); household access to services such as safe water and sanitation; and household socio-economic status.

The findings showed little evidence of differences in the nature of the socio-economic determinants or in the strength of their association with child nutritional status between urban and rural areas. Marked differences in the levels of these determinants in favour of urban areas were found, however. Urban mothers were consistently more educated (by a difference of approximately twofold) and had higher decision-making power. Maternal education is known to have profound beneficial effects on a range of child feeding, health seeking and care giving practices, and thus may be an important driver of urban/rural differences in child nutrition (Engle et al. 1997; Engle, Menon and Haddad 1997; Armar-Klemesu et al. 2000). Urban women were also more likely to have access to electricity, water and sanitation services (Smith, Ruel and Ndiaye 2003). Similar findings regarding the availability of electricity and sanitation services have been documented recently, using a different set of DHS data (National Research Council 2003). The authors show that, compared to rural dwellers, the urban poor have better access to electricity and flush toilets, but they are at a clear disadvantage when compared to other wealthier urban dwellers.

In our pooled analysis, large gaps in favour of urban areas were also found in the levels of key proximate determinants of child nutritional status in all three regions (see Table 1). This was true

especially for access and use of preventive maternal and child health care (e.g. maternal prenatal and birthing care and child immunization), and the timing and quality of complementary feeding. The only exceptions were practices related to breastfeeding, which were more likely to be optimal among rural compared to urban women (i.e. exclusive for the first six months and continued for up to 24 months).

Other evidence supporting the advantage of urban children over their rural counterparts is provided by country-level analyses. The findings are consistent with the pooled analyses; they show that: i) urban children tend to have better access to health services, which in turn is reflected by higher immunization rates (Ruel et al. 1998); ii) urban households are also more likely to have access to water and sanitation facilities, although they may come at high cost, especially for the poor (World Resource Institute 1996); and iii) except for breastfeeding practices, which are more likely to be optimal among rural mothers, children's diets in urban areas are generally more diverse and more likely to include nutrient-rich foods such as meat, dairy products and fresh fruit and vegetables (Ruel 2000; Arimond and Ruel 2002). Examples from IFPRI's analysis of 11 most recent DHS surveys show the consistently higher intake of milk and meat products by toddlers in urban compared to rural areas (Arimond and Ruel 2004) (see Figures 9 to 10). Foods of animal origin are of critical importance in young children's diets because they provide essential micronutrients such as iron, zinc and vitamin A, which promote health, growth and motor and cognitive development.

Thus, the better nutritional status of urban children appears to be the result of the cumulative effect of a series of more favourable socio-economic conditions, which in turn seem to lead to better caring practices for children and their mothers. As cautioned previously, however, global comparisons between urban and rural areas can be misleading because they do not take into account the large heterogeneity within area.

Finally, it is also important to recognize that although urbanization seems to bring about positive improvements in young children's diets, it also brings a number of unhealthy diet changes such as increased consumption of saturated and trans fats, sugars, salt and processed foods that contain excessive amounts of these components. This, combined with more sedentary lifestyles is causing dramatic increases in the prevalence of overweight/obesity and risk factors for a number of chronic diseases such as diabetes, cardiovascular diseases and certain forms of cancer (WHO/FAO 2003). Although these dietary changes affect mostly adults at first, they rapidly trickle down to other age groups such as schoolchildren and adolescents and eventually reach young children as well. This topic is addressed by Popkin and collaborators in this publication.

Table 1: Comparison of proximate determinants of child nutritional status across urban and rural areas, by region (pooled analysis of 36 DHS data sets)

| Proximate determinants | South Asia | | Sub-Saharan Africa | | Latin America and the Caribbean | |
|---|------------|---------|--------------------|---------|---------------------------------|---------|
| | Rural | Urban | Rural | Urban | Rural | Urban |
| Mother's nutritional status¹ | | | | | | |
| Woman's body mass index (BMI) | 19.1 | 20.5*** | 21.4 | 22.8*** | 23.6 | 24.3*** |
| Percentage of women underweight | 44.3 | 32.0*** | 11.6 | 8.8*** | 6.2 | 5.1*** |
| Prenatal and birthing care for mother | | | | | | |
| Percentage of women receiving any prenatal care | 57.3 | 83.9*** | 75.4 | 93.4*** | 72.8 | 92.5*** |
| Percentage of women with any prenatal care ≥ 3 visits | 58.5 | 80.1*** | 78.8 | 87.9*** | 86.3 | 94.4*** |
| Mean number of months before birth of first prenatal visit | 4.9 | 5.6*** | 4.1 | 4.4*** | 5.7 | 6.4*** |
| Percentage of women giving birth in a medical facility | 22.5 | 60.9*** | 32.5 | 72.0*** | 66.7 | 90.6*** |
| Child feeding practices | | | | | | |
| Percentage of children breastfeeding within one day of birth | 39.6 | 50.6*** | 68.6 | 73.3*** | 69.6 | 75.1*** |
| Percentage of children 0-4 months exclusively breastfed | 54.2 | 38.3*** | 20.0 | 17.7*** | 34.2 | 35.9*** |
| Mean number of months of breastfeeding | 14.8 | 12.1*** | 17.7 | 15.8*** | 8.6 | 7.2*** |
| Percentage of children 6-12 months having received foods | 42.3 | 54.6*** | 80.3 | 84.0*** | 79.7 | 84.6*** |
| Mean number of times child >6 months eats per day | 3.1 | 3.1 | 2.9 | 3.2*** | 4.5 | 5.0*** |
| Percentage of children >6 months receiving high-quality food ² (Nepal only) | 42.3 | 54.6*** | 80.3 | 84.0 | 69.5 | 80.3*** |
| Health seeking behaviours for children | | | | | | |
| Percentage of children with diarrhoea who are treated | 82.7 | 91.4*** | 81.2 | 90.2*** | 78.8 | 89.2*** |
| Percentage of children receiving any vaccinations | 80.0 | 90.5*** | 74.2 | 90.2*** | 90.2 | 96.6*** |
| Percentage of children receiving recommended vaccinations | 38.6 | 56.7*** | 41.8 | 62.7*** | 53.1 | 66.9*** |
| Quality of substitute child caretakers | | | | | | |
| Percentage of children with adult caretaker as women work ³ | 82.8 | 91.0*** | 79.2 | 87.7*** | 73.8 | 91.2*** |

Source: Smith, Ruel and Ndiaye 2003.

Notes: Stars indicate significant differences across rural and urban areas at the 1 percent (***), 5 percent (**) and 10 percent (*) levels.

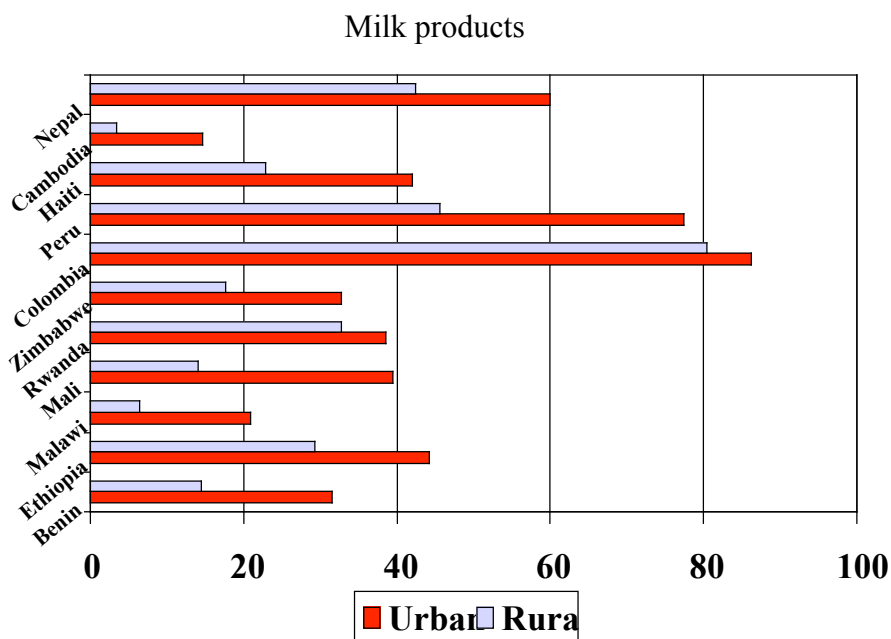
Country level means and percentages are calculated using sample weights provided with the DHS data sets. Regional means and percentages are calculated using a population-weighted average of the country level numbers.

¹ Data not available for Pakistan, Nigeria, Rwanda and Paraguay.

² Data not available for Bangladesh, India, Pakistan, Burkina Faso, Côte d'Ivoire, Malawi, Namibia, Nigeria, Rwanda, Senegal, the Dominican Republic, Haiti, and Paraguay.

³ Data not available for the United Republic of Tanzania.

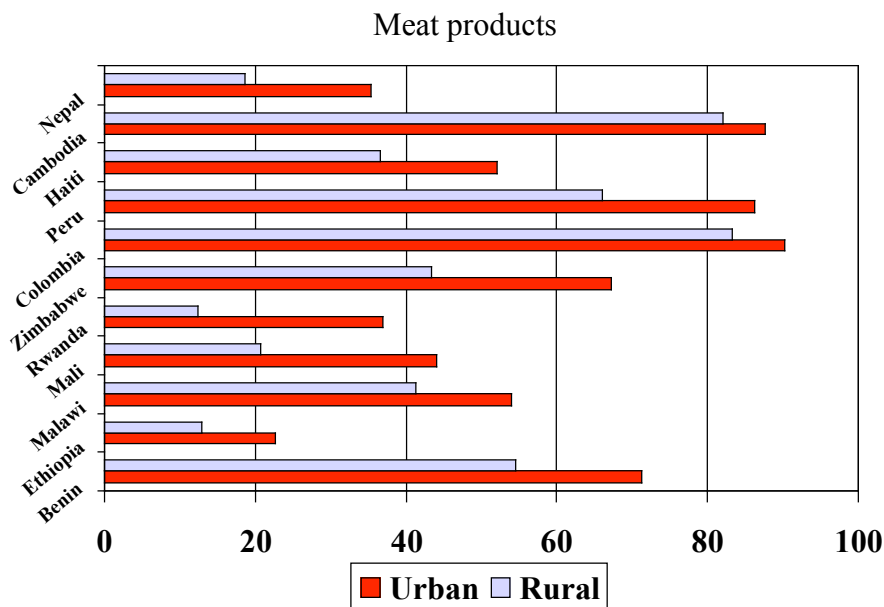
Figure 9: Percentage of children (12–24 months) who consumed milk products in the previous 24 hours (ongoing analysis of 11 DHS data sets)



Source:

Arimond and Ruel 2004.

Figure 10: Percentage of children (12–24 months) who consumed meat products in the previous 24 hours (ongoing analysis of 11 DHS)



Source: Arimond and Ruel 2004.

5. Features and Determinants of Urban Food Security

In this section we review key aspects of urban life that shape food security, particularly for the poor.⁶ We focus on the implications of urban residents' much greater reliance, in comparison with rural dwellers, on cash income and much decreased reliance on natural resources for food and other basic needs. We also note the rising presence of supermarkets on the urban food scene and the perhaps surprising importance of the formal sector, agriculture, seasonality and links with rural areas. Finally we highlight the changing roles of women and the potential implications for child care use and care giving practices.

The urban food economy

Urban residents purchase most of their food. City dwellers in metropolitan areas as diverse as Maputo, Cairo and Lima buy more than 90 percent of their food (Table 2). Even though the figures are lower for smaller urban areas, an urban-rural division is noticeable. Even in less urbanized countries such as Mozambique or Nepal, residents of smaller and intermediary cities commonly buy 75 percent or more of their food, while rural residents purchase less than half of the food they consume.

Table 2: Percentage of total food consumption value that is purchased

| Country | Metropolitan areas | Other urban areas | Rural areas |
|------------|--------------------|-------------------|-------------|
| Egypt | 98 | 95 | 85 |
| Malawi | 91 | 90 | 36 |
| Mozambique | 92 | 73 | 29 |
| Nepal | 94 | 78 | 42 |
| Peru | 92 | 89 | 58 |

Note: Metropolitan areas are: Egypt: Cairo, Alexandria, El Suez; Malawi: Blantyre City, Lilongwe; Mozambique: Maputo, Matola; Nepal: Kathmandu; Peru: Lima, Callao.

Source: Garrett and Ersado (unpublished).

These outlays are significant, as food expenditures are by far the largest portion of total household budgets (Table 3). Even in the largest cities, where households must also spend on housing and several other services, food is commonly close to, and sometimes even more than, half of household consumption expenditure. In secondary and intermediary cities the figure is higher – around 60 percent – but is still lower than in rural areas where food budget shares in countries such as Malawi, Mozambique and Peru reach 70 percent and higher. The poorest (the lowest expenditure tercile) allocate even more to food, and this is true across urban and rural areas (see Table 3).

Housing, which is usually the second largest budget item in urban areas, varies widely between metropolitan areas, accounting for between 6 and 28 percent of total expenditures. With the exception of Egypt, the share of the total budget spent on housing is consistently lower in rural compared to urban areas.

⁶ For additional reviews see Ruel et al. 1998; Ruel, Haddad and Garrett 1999; Garrett and Ruel 2000; Garrett and Ruel 1999a.

Table 3: Food and housing expenditures as a percentage of total consumption expenditure (budget shares)

| | Metropolitan areas | Other urban areas | Rural areas |
|----------------------------|--------------------|-------------------|-------------|
| Egypt | | | |
| Food budget share (all) | 48 | 49 | 58 |
| Lowest expenditure tercile | 53 | 54 | 62 |
| Housing budget share | 6 | 8 | 8 |
| Malawi | | | |
| Food budget share | 43 | 53 | 75 |
| Lowest expenditure tercile | 53 | 64 | 78 |
| Housing budget share | 16 | 9 | 4 |
| Mozambique | | | |
| Food budget share | 59 | 65 | 70 |
| Lowest expenditure tercile | 63 | 67 | 70 |
| Housing budget share | 9 | 8 | 7 |
| Nepal | | | |
| Food budget share | 37 | 50 | 64 |
| Lowest expenditure tercile | 55 | 57 | 74 |
| Housing budget share | 28 | 14 | 7 |
| Peru | | | |
| Food budget share | 46 | 51 | 70 |
| Housing budget share | 21 | 16 | 8 |

Note: Metropolitan areas are: Egypt: Cairo, Alexandria, El Suez; Malawi: Blantyre City, Lilongwe; Mozambique: Maputo, Matola; Nepal: Kathmandu; and Peru: Lima, Callao.
Source: Garrett and Ersado (unpublished).

Urban food prices and expenditures depend on a number of factors including: i) the efficiency of the food marketing system; ii) household purchasing patterns such as whether the family buys in bulk or in small quantities and where they purchase their food; iii) the household's ability to produce some of its own food through home garden or urban agriculture; iv) the household's access to public transfers, such as food subsidies or food aid programmes, or private transfers, such as an exchange relationship with rural or other relatives; and v) macroeconomic policies, including the availability of food subsidies.

Urban food marketing systems, especially those that serve the poor, are frequently inefficient, in terms of providing adequate quantities, good quality, or competitive prices (Aragrande and Argenti 2001; Argenti 2000). Wholesale markets, when they exist, frequently have not adapted to the dramatic rise in food quantities consumed by the cities that has accompanied urbanization. Most were built decades ago and now sit in central areas of cities, hemmed in by and creating congestion. Their storage facilities are often inadequate or badly managed. Traffic congestion, lack of storage (especially refrigeration for perishables), and atomization of retail outlets add to marketing costs.

More and more, however, supermarket chains are displacing traditional retailers in many countries of Africa, Asia and Latin America (Reardon et al. 2003), perhaps presenting a way to overcome these structural inefficiencies with new store placements and large purchasing and distribution networks. In Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico, for example, supermarkets now account for 45 to 75 percent of food retailing. In the remainder of Latin America, largely lower-income and less urbanized, the share is 20 to 40 percent (Reardon and Berdegue 2002). Supermarkets have about 50 to 60 percent of food retail sales in South Africa,

and have a significant presence in Kenya. Multinational supermarket chains have expanded, at least nominally, into most other countries of southern and eastern Africa as well (Weatherspoon and Reardon 2003).

Supermarket chains will undoubtedly grow quickly to capture more of the retail share in the future. In 1994, for example, supermarkets accounted for 15 percent of national food retail in Guatemala and now, ten years later, account for 35 percent (Reardon and Berdegúe 2002). But even these statistics show that the traditional food retail sector, including public markets, street vendors and small shops, still dominates urban food marketing. In Africa, multinational chains do not yet extend into poor urban neighbourhoods and towns, and have a significantly reduced presence in the poorer countries (Weatherspoon and Reardon 2003). In addition, evidence is mixed as to whether these large-format “modern retail” outlets result in lower food prices (Reardon and Berdegúe 2002), especially for staples that make up the bulk of the diet of the poor.

Thus, the burgeoning of supermarkets in developing countries may not be of immediate relevance for the urban poor. Large chains are unlikely to establish a significant presence in slums or ghettos any time soon. Even if they appear at the periphery of poor settlements, they may not be convenient for the poorest slum dwellers if they lack transport or cash to purchase in bulk. It is also not clear that the prices offered at supermarkets would be attractive enough for the poor to make them change their purchasing patterns in the short term. Supermarkets may also have a negative effect on employment, since many of the poor work as food vendors or transporters. It is likely that a purchasing pattern similar to that of some developed countries will emerge: upper- and lower-income consumers shop at chains, with lower prices and better quality, while the inner-city urban poor have limited options and continue to purchase food on a daily basis at small corner stores that may also offer credit. Although developing country producers and processors must pay attention to the new market opportunities that supermarkets present, policy-makers must continue to pay attention to improving the efficiency of traditional systems that will continue to serve the bulk of the urban poor.

Urban livelihoods

The importance of the market in urban areas means that urban dwellers, including the poor, need cash income and thus employment. Here we summarize recent findings concerning employment and income in urban areas.

The poor work in a variety of jobs, but working long hours in often precarious conditions for low wages is a constant. Jobs tend to be irregular and tenure insecure. The poor may work in clothes factories, run small shops, sell food or cigarettes in the street, scavenge in rubbish dumps, sweep streets and clean latrines, drive rickshaws, or seek day work in construction (Asian Development Bank 1994; International Labour Organization 1998; CARE Bangladesh 1998; CARE Tanzania 1998).

Many, though not all, work in the informal sector. In the 1990s, the informal sector represented 60 to 75 percent of urban employment in Guatemala, El Salvador and Honduras, but only one-third in Costa Rica (Funkhouser 1996). It generated 60 percent of female employment in many West African cities (Meagher 1995) and was one-third of the urban labour force in Nigeria (Simon 1998). Once thought to be only a coping strategy or a dead end, numerous studies have now illustrated the dynamism and heterogeneity of the informal sector. Although workers tend to earn low wages, incomes of business owners in the informal sector can be 25 percent or more higher than those in the formal sector (Portes, Blitzer and Curtis 1986).

Jobs in the informal sector are important, but formal sector jobs (government, private sector) are too. In fact, in most countries most urban residents, even poor ones, do not work in the informal sector (meaning here the self-employed). Comparing data in metropolitan areas in four countries in Latin America, Africa and Asia, Garrett (2004) found that at least as many, and often a large majority of paid urban dwellers work in the formal sector (Table 4). In Egypt and Malawi 70 percent or more of jobs paid wages or salaries.

Table 4: Job sector (percentage), by country, area and gender (Living Standards Measurement Surveys [LSMS])

| Country/area | Overall | By sex | |
|---------------------|---------|--------|--------|
| | | Male | Female |
| Egypt | | | |
| Metropolitan areas | | | |
| Private wage/salary | 34 | 37 | 27 |
| Public wage/salary | 48 | 44 | 66 |
| Self-employed | 18 | 20 | 7 |
| Ghana | | | |
| Accra | | | |
| Private wage | 27 | 45 | 14 |
| Public wage | 11 | 18 | 6 |
| Self-employed | 60 | 37 | 77 |
| Unpaid | 2 | 1 | 3 |
| Malawi | | | |
| Metropolitan areas | | | |
| Private | 44 | 49 | 29 |
| Public | 31 | 28 | 41 |
| Self-employed | 20 | 18 | 25 |
| Other | 5 | 5 | 5 |
| Peru | | | |
| Lima | | | |
| Private | 32 | 37 | 26 |
| Public | 12 | 9 | 15 |
| Self-employed | 44 | 48 | 38 |
| Unpaid | 13 | 6 | 22 |

Source: Garrett 2004.

The public sector also remains an important source of employment (Table 4). In Egypt, half of all urban residents in the major metropolitan areas of Cairo, Alexandria and El Suez, worked in the public sector, with two-thirds of working women having jobs there. According to the ILO, public sector employment still accounts for more than 20 percent of formal sector wage employment in a number of African countries, including Ghana, Nigeria and the United Republic of Tanzania (Garrett 2004).

Agriculture, forestry and fishing are still important to the incomes of urban dwellers, especially outside large metropolitan areas. Even in the largest cities, many workers earn their living indirectly from agriculturally based enterprises, such as transporting, processing or selling food. Urban businesses also provide agricultural inputs such as seeds, chemicals, tools and machinery. Garrett (2004) notes that even in large metropolitan areas, 2 or 3 percent of urban dwellers earn a living from agriculture. In Lima, almost 10 percent of workers (mostly men) earn a living from farming or fishing. Outside the largest cities, the numbers jump: agriculture is the main livelihood for almost 10 percent of urban dwellers outside major metropolitan areas in Egypt and Malawi. The differences between the importance of agriculture in the metropolitan and other areas are more dramatic in Mozambique. While in Maputo, the capital city, agriculture provides 7 percent of jobs (still not negligible), agriculture is the main occupation for 63 percent of urban residents outside Maputo – and the main occupation for about 85 percent of women (Massingarela and Garrett 2002). Finally, in Dar es Salaam, 90 percent of all green leafy vegetables consumed are grown inside the city limits.

Women (see below) and children are also engaged in income-generating activities in urban areas. Ersado (2003) found that 10 percent of urban children in Nepal, but only 2 percent in urban Peru, and 3 percent in urban Zimbabwe, work exclusively (that is, they do not also go to school). The study suggests, however, that although working can have a negative impact on learning and may expose children to exploitive and dangerous labour practices, working does not always come

at the expense of school. Five percent of children in urban Nepal and 9 percent in urban Peru both go to school and work.

A final, largely underestimated characteristic of urban life is the threat that seasonal changes pose to the livelihoods of the urban poor. The changes are often related to rains, but not necessarily to agriculture. Threats to health arise when rains cause sewers to overflow and spread disease. Rains can bring the activities of casual labourers, such as rickshaw drivers, construction workers and street vendors, to a halt. CARE Bangladesh (1998) reports that incomes decrease among casual labourers such as rickshaw drivers and construction workers in Dhaka in the rainy season, primarily because they work outdoors and may suffer from increased likelihood of illness or reduced clientele (CARE Bangladesh 1998). An additional factor is the increased migration of rural dwellers to cities when rains take them out of a job at home, which results in increased competition for already scarce jobs in urban areas. The rainy season may also complicate transport of food from rural to urban areas, resulting in increases in food prices, which exacerbate the effects of declines in income.

6. Women's changing roles, food security and child care in urban areas

With current worldwide globalization trends, employment opportunities for women have been increasing – more jobs, more variety in job types and more diverse work environments are available (Johnson-Welch et al. 2000). It is estimated that about 50 percent of women are currently part of the formal labour force; and women constitute up to 75 percent of the informal and semiformal sectors (Mehra and Gammage 1999 in Johnson-Welch et al. 2000). Unfortunately, information on the urban/rural breakdown for these numbers is not available, to our knowledge.

Even with their new employment opportunities and their increasing contribution to the labour force, women continue to face the same issues they have always faced in the labour market; they are still over-represented in less secure and irregular jobs, often getting paid less than men even for the same job (de Haan 2000), and they often work as unpaid family labour. Also, the recently documented trend of a narrowing in the wage gap between men and women, which could suggest improvements in employment conditions for women, actually reflects a drop in men's wages, rather than an increase in those of women (UN Research Institute for Social Development [UNRISD]), 2000 in Johnson-Welch et al., 2000).

Furthermore, although women's participation in the labour force has grown much faster than men's in recent decades, still proportionally far fewer women work than men (de Haan 2000). Generally, women have less access to capital, unpaid family labour and markets, social and formal networks (Ypeij 2000; Marcucci 2001). They also increase the resilience of the household in its ability to respond to shocks, frequently carrying the burden of having to work and devise innovative coping strategies for the household (de Haan 2000). Pradhan and van Soest (1997) found that in Bolivia lower earnings by the husband led to more hours of work by the wife.

In some cases, religious or cultural restrictions may restrict mobility or the kinds of jobs women can have (Simon 1998; Sutter and Perine 1998). Other less obvious institutional discrimination also restricts women's choices. In Bangladesh, the lack of housing or hostels for single women limits their mobility and may influence rural women's decisions to migrate to the city for work. Half of the women working in the clothes factories live less than 1 km away, whereas only 20 percent of the men live so close (Asfar 1997). Similarly, lack of good-quality child care may restrict women's choices, forcing them to do informal work at home or not work at all (see following section on women's employment and child care).

Women working outside the home challenge traditional conceptions of women's roles held by men and the women themselves. Zhang (1999) describes a process of empowerment in China as women workers, many of whom who came to the city from rural areas, discovered new freedom. They spent their wages on their own personal items and hobbies. Their circle of social contacts widened.

Women's employment and child care use

With increased employment opportunities, however, the trade-offs women face between their role as income earners and their child care and family responsibilities become even more acute. Women are largely involved in informal jobs that are not subject to labour laws and do not offer social or medical benefits. For those in the semiformal or formal sector, they often risk losing their job when they have to skip work to attend to a sick family member, and maternity benefits are largely unavailable or minimal.

The question as to whether women's employment outside the home translates into net benefits for their children and their household remains contentious. Evidence suggests that although the overall impact of maternal employment on child health and nutrition is linked to the amount of income generated (and of control over resources), other factors such as the type and conditions of work, the availability and quality of child care alternatives and the child's age are more important (Engle, Menon and Haddad 1997).

High-quality alternative child care is obviously key to tempering the potentially negative impact of women's labour force participation on children's well-being. Little information exists, however, on the supply and use of different child care arrangements in urban areas of the developing world and on the availability of informal alternatives such as older siblings, other relatives or neighbours.

Our analysis of 11 Demographic and Health Surveys (DHS) data sets⁷ from the early 1990s (Ruel, Haddad and Garrett 1999) provides some, albeit slightly outdated, information on this issue. In this set of countries, a smaller percentage of employed urban mothers compared to rural mothers took their child to work with them, probably because they tended to work in the streets, in markets or in factories rather than in agriculture as most rural women do. In Latin America, a greater percentage of urban than rural mothers used relatives as alternative child care givers, but no consistent pattern was found in Asia and Africa. Hired help and institutional care were consistently higher in urban areas in all three regions, although institutional care use was almost non-existent in Asia and very uncommon in three of the four African countries studied. It is likely that such low reported use of institutional care is related to the lack of availability of these services in the countries studied.

A recent IFPRI comparative study of Accra (Ghana) and Guatemala City (Guatemala) indicates that in both sites, women's employment and child care choices are highly influenced by the age of their youngest child (Quisumbing, Hallman and Ruel 2003). Mothers with children under three years of age are less likely to be working and, if they do work, they are less likely to use formal child care compared to mothers with older children. In Guatemala City, another important determinant of women's decision to work is the presence of an adult woman (a potential alternative child care giver) in the household. In Ghana, where most urban women work in the informal sector, those who have to resume work for economic reasons when their infant is still young usually take the infant along to their workplace. Depending on the work environment, this may or may not be positive for the child, but at least it is likely to help preserve breastfeeding, which should confer important nutritional benefits to the child.

These findings confirm that women do adapt their work patterns to their specific family circumstances and that the well-being of their children is the overriding force behind their decisions to work and to use child care alternatives. These "adaptive strategies" by which mothers stop working, or work fewer hours, or even take their infant to work if they have to work, may be successful in protecting their infant. They may, however, seriously jeopardize the mothers' ability to generate income and to protect their household's livelihood and food security, especially if they are the sole income earner. Effective programmes and policies are urgently needed in developing countries to support working women, especially women with young children who have limited or no access to extended family networks or other affordable, yet reliable substitute child care options.

7 This analysis included two data sets from Asia (Bangladesh, 1993; Pakistan, 1991); four countries from Africa (Ghana, 1993; United Republic of Tanzania, 1991-92; Senegal, 1992-93; Zambia, 1992); and five countries from Latin America (Brazil, 1996; the Dominican Republic, 1991; Peru, 1992; Colombia, 1995; and Guatemala, 1995).

Women's employment and care giving practices

Evidence on the effect of women's employment on care giving practices such as breastfeeding, complementary feeding, preventive and curative health seeking behaviour, and psychosocial care is mixed (Engle, Menon and Haddad 1997). But overall, there is little evidence that maternal labour supply has a negative effect on these practices or on children's health and nutritional status (Blau, Guilkey and Popkin 1997; Glick and Sahn 1988). For example, studies have shown that, contrary to general belief, maternal employment was not a main determinant of breastmilk substitute use in developing countries (Hight-Laukaran et al. 1996) nor was it systematically related to shorter breastfeeding duration (Winikoff, Castle and Hight-Laukaran 1988).

Our study in Accra documented that child feeding, hygiene or health seeking behaviours were not affected by maternal employment (Amar-Klemesu et al. 2000). In this context, the key factor that was consistently associated with better care giving practices was higher maternal schooling, which in Accra is not related to whether or not mothers work. In this large urban centre, the majority of women do work, irrespective of their educational level, and they work mostly in the informal sector in petty trade, street food processing and vending. As noted above, mothers of young infants in Accra are more likely to take their young infant along when they have to resume work soon after delivery, than leave the child with an alternate care giver. This is probably the main reason why maternal employment has not resulted in poorer child care practices.

Additional, indirect evidence that women's employment in urban areas may not necessarily have a negative impact on child care practices again comes from global urban/rural comparisons. We showed previously that, with the exception of breastfeeding, child feeding practices are substantially better in urban compared to rural areas, in spite of the fact that a larger proportion of women in most developing countries are engaged in income-generating activities, often away from home (see section on why urban children are better off nutritionally than rural children).

Overall, mothers appear to be amazingly efficient at combining their income-generating activities and their child care responsibilities, and at buffering the potentially negative impacts of their employment patterns on their children's well-being. But at what cost – for themselves and for their household food and livelihood security? This question remains largely unanswered because whether the food security situation of poor working women is alleviated or aggravated by their participation in the labour force largely depends on their specific set of resources and constraints.

7. Lessons Learned and Implications for Urban Programming

What have we learned from this research and what are the implications for urban programming? This section summarizes our key findings with a focus on their implications for the design and implementation of effective urban programmes. We also draw from our collaborative work with CARE International on urban livelihoods in Bangladesh, Ethiopia and Peru (Garrett 2002) and from our experience with the government-sponsored Community Daycare Program in Guatemala (Ruel et al. 2002)⁸ and suggest some approaches to addressing the challenges and opportunities of urban programming.

Here we provide a brief overview of some of the challenges and opportunities of urban programming, based on the results of our research and our experience collaborating with CARE in the implementation of the programmes noted above.

Heterogeneity and mobility: Where are the poor, food insecure and malnourished?

Urban areas are immensely diverse and our findings confirm the wide disparities that exist in childhood malnutrition and food insecurity within an area. This heterogeneity may add complexity

⁸ These programmes all aim to reduce urban food and nutrition insecurity, although they differ in their specific approach, components and operational aspects. They all involve some type of food aid, whether monetized or used directly as food.

to the design, targeting and implementation of programmes, as social mores and networks, conditions, cultural practices and livelihood strategies change from household to household and neighbourhood to neighbourhood. The fact that the poor and the rich live side by side also complicates programme targeting. Community targeting, a popular and generally effective programme targeting approach in rural areas, may not be effective in urban areas where the poor do not necessarily cluster geographically (Morris et al. 2002).

Livelihood strategies are also equally diverse and programme strategies must take this heterogeneity into account. Programmes to raise employment and income, for instance, will probably be more effective if they focus on providing the context for growth (training to increase worker productivity; policies to provide firms with credit and encourage them to identify and respond to market demand; and good communications and transportation networks), rather than pursuing a sector focus, such as might be done in rural areas.

Mobility of urban residents can also add complexity to programme targeting and reduce programme impact. Evictions can erase gains due to projects, and projects may completely miss those who are most vulnerable if they are the most mobile (the homeless, for instance). But the general perception that urban residents are so mobile that projects cannot provide them with any beneficial effects seems misguided. A large proportion of the urban poor in our case study countries, for example, were not recent migrants; they were residents who sought stability and an inviting environment to establish their roots. In Peru, many of the residents interviewed in the CARE programme areas had been in the area for 15 to 20 years and had since been fighting for land and for later improvements, such as in water and sanitation. In Bangladesh, about 80 percent of residents in the two areas studied (one a suburb of Dhaka, the other, a good-size city) had been in the area for more than five years. In Ethiopia, with government ownership of land, there was very little movement in or out of the communities. In addition, the extent to which mobility matters depends mostly on the specific nature of the project. Infrastructure projects and community kitchens, for example, meet the needs of the community, regardless of how mobile the population is.

What can programmes do to reduce childhood malnutrition in urban areas?

Our data confirm that, although on average childhood malnutrition is lower in urban compared to rural areas, the rates of malnutrition among poor urban children often rival those of their rural counterparts. Moreover, we demonstrated that the factors responsible for poor child nutritional outcomes are the same in urban and rural areas. Thus, the same programme framework and sets of interventions developed for rural areas can be used to address childhood malnutrition in urban areas. As indicated above, however, it is likely that programme targeting will have to be done differently, i.e. either at the individual level or at the group level, but probably not at the community (geographic) level. Poor urban children deserve as much attention in the development agenda as rural children, because their health and development are equally key to national human capital formation and growth. Advocacy efforts should continue to highlight inequalities in urban areas and the heavy toll that poverty and food insecurity exert on urban children, so that resources can be mobilized to address the needs of this highly vulnerable group.

Urban livelihoods: Employment and income, and women's work and child care

Livelihood security in urban areas depends on a complex set of interrelated factors, of which employment and income are crucial. Our empirical data also confirm that most food consumed by urban dwellers is purchased and that food expenditures account for more than half of the urban household budget. Thus, programmes aiming at reducing the cost of food for the urban poor – such as food aid, food subsidies, urban agriculture, technology and food policies to reduce the cost of food – are likely to be particularly important for urban livelihoods. Similarly, employment is essential because urban dwellers need money for most of their basic needs. For women, however, employment brings about yet another basic need to be fulfilled, i.e. the need for support with child care.

Our empirical data concerning women, employment and child care point to an apparently widespread and effective system of maternal buffering, by which mothers adapt their working patterns to the special needs of their children. Mothers use a variety of mechanisms to protect their child while they work: they work part-time; they take their child along; they work at home; or they work in the informal sector to have more flexible schedules. But at what cost do these coping strategies have for them (in terms of stress, time, famine, physical and mental health, and household food security) and for their young child (in terms of safety of the environment, and time and quality of care received)? Clearly, more research in this area is needed, but there is no doubt that urban mothers, and especially single income earners, need support with child care responsibilities. An example of a successful programme that specifically addresses the needs of urban working mothers is the government-sponsored Community Daycare Program in Guatemala (see Box for details). This type of programme, which is highly popular in Latin America, has the double advantage of providing affordable and reliable child care for extended hours, and allowing women to secure a more formal employment and receive employment benefits.

Land and housing security

Land and housing security are critical to project success. Infrastructure improvements, for example, may lead to increases in rent, thereby forcing the programme's beneficiaries to move to cheaper housing. Tenure security is also critical for a variety of social programmes. For example, in the context of the community kitchen programme in Peru, local authorities have on occasion tried to take over the kitchen, claiming it was a government organization that belonged to them. But by owning their own space and officially incorporating the kitchen as a community organization, the women used the legal system to defend ownership of the kitchen against these encroachments.

Tenure security is also important for employment and livelihood. Field (2003) shows that introduction of title reform in eight cities in Peru increased the numbers of hours worked by households by 17 percent on average, as a result of families no longer having to leave a member safeguarding the homestead for fear of eviction.

Crime and violence

Slums are often perceived, sometimes fairly, as centres of crime and violence. Violent crimes take away lives and livelihoods, undermine social unity and threaten project staff. In Lima, communities had to deal with local youth gangs and terrorism in the shape of Sendero Luminoso. In Guatemala City, the Community Daycare Program was unable to open day care centres in some areas of the city because of security issues. Crime, however, is not rampant in all urban areas. In Bangladesh, outside the major metropolitan areas, violent crime appears to be rare, with petty crimes such as theft being somewhat more common. Crime in many areas tends to illegal smuggling (alcohol, for example) and prostitution. In study sites in Bangladesh domestic violence is prevalent and practically accepted by the women themselves as a legitimate way for men to express their frustrations. In developing and operating projects, working with community residents, who live with the community's crime and violence every day, can help to outline a strategy to confront crime and reduce risks to beneficiaries and project staff.

Poor social networks and lack of cohesion

All these factors (diversity, tenure insecurity, mobility and crime), may weaken community cohesion and social networks. Programmes that depend on community interest or peer pressure, such as credit groups, may fail. Projects may also suffer, if residents have limited knowledge of other members of their community.

Although it is true that some aspects of urban living encourage "independence", others, such as relatively high education levels and relative ease of communication, may actually encourage group action. Urban protests against structural adjustment policies are solid evidence that urban residents can form effective groups quickly. In cities, social relations extend beyond the geographic bounds

of the community. They are founded in ethnicity and kinship as well as politics, social issues, culture, religion, sports and employment. Illegal activities also form common connections among slum dwellers. Urban dwellers do have social networks. They may be different, but they are not necessarily weaker than those in rural areas.

Urban dwellers also usually have at least some experience in working together. In Peru, the women who ran the community kitchens had decades earlier joined together to invade the land and demand public services such as water and electricity. Funeral societies are common in Addis Ababa. Projects can take advantage of the structure, or at least the experiences, that these organizations provide.

Finally, just as projects depend on community cohesion to work, they may also be important means to strengthen community ties. As with mobility, the importance of that cohesion may vary with the project. Social unity may make little difference to individually targeted programmes, for instance, but may matter a great deal to community-based maintenance of infrastructure.

Projects and politics

The nature of urban living – the crowded conditions, scarcity of natural resources and investments required for public services – practically requires government intervention. In urban areas, government authorities tend to play larger roles in daily life than in rural areas. In cities, informing local authorities and organizations about project activities is vital. Actively involving them can also be beneficial, and can help leverage resources they may have. Projects should not overlook informal authorities, including crime lords and community and religious leaders, who often exert substantial influence on community activities.

For the most part, CARE's programmes in the case study countries dealt effectively with potentially troublesome local political relations. They kept government authorities at all levels involved and informed, even taking them on as partners. Maintaining good relations with local stakeholders and educating politicians and bureaucrats about the project can counter upheaval at the top. Legal agreements clearly outlined institutional roles, responsibilities and commitments.

The project's design and management should also be flexible enough to accommodate change. Project managers should assess how potential economic and political changes can affect the project, and incorporate an ability to respond into project management. Staff should be aware of continuously evolving economic, political and social conditions, and adjust the project as necessary. Changes by donors in funding priorities proved to be the biggest challenge to the operation and sustainability of projects reviewed, not local political changes.

8. Responses to programmatic challenges⁹

The final part of this paper presents a series of insights from our collaborative work with CARE into potential strategic responses to challenges in urban programming. It tries to illustrate that while urban livelihoods are complex, the complexities are manageable when actions follow some general principles. These principles also permit adaptation of the programme to respond to the challenges noted above.

Adapt to challenges by appropriately identifying needs, constraints, resources and levers

Programmes should enter communities cautiously. An institutional analysis can explore the influence of different community organizations, NGOs and political actors and the resources – human, financial and physical – available. This allows a programme to navigate more easily tricky political relations, focus on strategic interventions, facilitate processes and mobilize community and household human and financial resources. Use of a holistic analytical framework, such as a

⁹ Additional information on CARE's programmes can be found on IFPRI's Web site (www.ifpri.org).

livelihoods approach that emphasizes connections among livelihood security areas, will help programmers get out of sectoral boxes in framing problems and devising solutions.

Reduce complexity by focusing on a limited set of objectives, activities and location, and exploit comparative advantages

Urban “complexity” stays manageable when programmes refrain from attempting to address all problems of poor communities and instead try to unravel the complexity by focusing on a strategically chosen strand. Organizations must identify their own strategic niche and adapt to local conditions and the leverage resources it has. In Ethiopia, for instance, CARE understood that its comparative advantage was in building and maintaining roads, while other organizations such as World Vision were more experienced in building houses. In partnership, World Vision and CARE could bring both better housing and roads to these communities, instead of working against one another.

Manage diversity complexity by starting small, scaling up, learning and being flexible

Even if programmes understand the local environment and have an initially limited focus, conditions change and programmes must develop over time. Successful programmes, then, will start small and scale up as they learn-by-doing. Management processes, however, must exist to support such an approach, which involves institutional learning and flexibility to respond to new situations as they arise. Sustainable programmes will also welcome input, support and collaboration from beneficiaries and other stakeholders, and build capacity. CARE utilized these principles in Peru. Staff and beneficiaries learned together. The programme started by using the skills that the women already had (for example, how to cook) and built capacity in other aspects over time (such as staffing and inventory management).

Confront issues of sustainability and political uncertainty by involving and empowering stakeholders, tending to facilitation, not implementation

Experience now demonstrates that empowerment of local partners and of beneficiaries improves the probability of success and sustainability of programmes. Communities and local institutions should implement projects, with outsiders serving primarily as change agents and initial sources of expertise and financial resources. Beneficiaries in Ethiopia and Peru emphasized that they valued the fact that project staff respected them and believed in their capacities, even though they were poor. They also highlighted the importance of establishing well-known, fair rules that were enforced, and not favouring one individual or another because of greater wealth or political connections.

Ensure that donors and organizations help to create the economic, political and legal environment and project monitoring systems that promote such facilitation and sustainability¹⁰

Developing community capacity to manage programmes and access outside resources takes time, as does helping authorities recognize their own responsibilities to vulnerable populations and to the democratic process. Creating conditions for others to implement a project usually takes longer than if the organization simply implemented a project itself, but this latter approach does not create capacity or enhance the prospects for long-term sustainability.

Innovative financial arrangements should bring funding agencies closer to communities. Generally, donor aid goes through or must be approved by a national government, providing an obstacle to true decentralization and the building of design and management capacity at the local level. Project development guidelines and monitoring and evaluation tools, such as logical

¹⁰ See the special issue of *Environment & Urbanization* (Brief 3, April 2001) on Rethinking aid to urban poverty reduction: lessons for donors.

frameworks, generally reflect an assumption that the recipient of the funds will implement, not facilitate, the project. Donors must change this approach to promote facilitation. They should pay greater attention to time frames needed for capacity building, employ phased indicators appropriate to the time frame, identify new indicators of process, facilitation and capacity building, and incorporate flexibility in the design of the project.

The Community Daycare Program in Guatemala: an example of an effective urban programme to assist working mothers and their children

The Community Daycare Program in Guatemala was designed to assist working parents, single mothers in particular, with low-cost, quality child care within their community. In this programme a group of parents select a woman from the neighbourhood and designate her as the care provider. She then provides care, hygiene and food for up to ten children in her own home in return for a small stipend provided jointly by the parents and the programme administration. The programme also provides cash to purchase food for beneficiary children, which is complemented by monthly food donations from the World Food Programme (WFP). These are usually 44 lb (20 kg) of maize, 1 gallon (approximately 4.5 litres) of cooking oil, and 13 lb (approximately 6 kg) of black beans – or six cans of fish).

IFPRI's evaluation of the programme in Guatemala City found that overall it was operating quite effectively, in spite of a few operational constraints. These included the lack of participation of the beneficiary parents (related to their heavy work and commuting schedule), and the extra demands on the care providers to go to receive their monthly payments and the food donations. The programme, however, proved to be an effective food aid targeting mechanism because it allowed poor working parents and their children to participate in spite of their busy schedule. The programme was also found to have a substantial positive impact on the diet of beneficiary children who consumed on average 20 percent more energy, protein and iron, and 50 percent more vitamin A than non-participants. There was no evidence of substitution at home and therefore the net benefits on the quality of the diet of participating children are substantial.

The programme also seemed to reach its targeted beneficiaries, i.e. poor urban working parents, and especially single mothers. Beneficiary mothers were slightly less educated, had fewer assets, lived in more precarious conditions, and were more likely to be single, compared to non-beneficiary working mothers from the same neighbourhoods. Probably as a result of their participation in the programme, beneficiary mothers were more likely to be employed in the formal sector and to receive work-related social and medical benefits. Their income was 30 percent higher than the income of working mothers who used other child care alternatives.

Thus, the Community Daycare Program is a feasible and efficient mechanism to target and deliver food assistance to poor urban children. It is clearly a type of programme with great potential and, if implemented successfully as it is in Guatemala City, can have a significant nutritional impact on children and on their family's food security. Moreover, the programme does effectively support working parents' efforts to seek and secure paid employment away from home, which in urban areas is essential to livelihood security. Its success in reaching single women also contributes to reinforcing these women's efficiency in managing their dual role as income generators and child care givers. Thus, the model of the Guatemala Community Daycare Program is particularly well suited for an urban environment because it addresses the unique characteristics of urban livelihoods.

A constraint often overlooked in urban programming is the inability of working parents to participate in programmes that require attendance or regular contacts with programme staff during the daytime when they are at work. Typical food assistance programmes that operate through maternal and child health programmes, for example, are likely systematically to exclude the working poor and even more important, single mothers. Urban programming needs to pay more attention to the particular needs of poor working women and design innovative approaches that will help them complement their basic livelihood strategies, rather than interfere with them.

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9. Annex

Urban/rural differences in food insecurity in sub-Saharan Africa

| Country | Survey year | % living in urban areas | Percentage of population that is energy deficient ¹ | | | Number of people that are energy deficient | | | % energy deficient people contributed by urban areas |
|------------|-------------|-------------------------|--|-------|-------|--|------------|-----------|--|
| | | | National | Rural | Urban | National | Rural | Urban | |
| Burundi | 1998 | 8 | 74.8 | 76.6 | 41.4 | 4 898 046 | 4 594 577 | 227 720 | 4.65 |
| Ethiopia | 1999 | 17 | 81.5 | 80.1 | 90.4 | 51 167 330 | 41 658 895 | 9 739 145 | 19.03 |
| Ghana | 1998 | 37 | 51.6 | 50.8 | 53.1 | 9 519 875 | 5 867 047 | 3 663 935 | 38.49 |
| Guinea | 1994 | 28 | 45.1 | 40.6 | 54.3 | 2 897 639 | 1 865 090 | 994 288 | 34.31 |
| Kenya | 1997 | 30 | 43.8 | 46.3 | 30.1 | 12 282 834 | 9 036 801 | 2 566 047 | 20.89 |
| Malawi | 1997 | 14 | 73.3 | 72.9 | 76.3 | 7 084 394 | 6 041 012 | 1 051 581 | 14.84 |
| Mozambique | 1996 | 35 | 60.4 | 63.0 | 50.7 | 9 802 920 | 6 638 005 | 2 886 596 | 29.44 |
| Tanzania | 2000 | 28 | 43.9 | 41.8 | 52.7 | 14 792 544 | 10 169 318 | 4 936 666 | 33.37 |
| Uganda | 1999 | 14 | 39.6 | 39.3 | 41.6 | 8 561 520 | 7 319 023 | 1 246 557 | 14.55 |
| Zambia | 1996 | 43 | 72.6 | 73.0 | 71.9 | 6 689 654 | 3 813 932 | 2 868 691 | 42.88 |

¹ In this study, household energy availability was computed using consumption/expenditure data from nationally representative data sets. Total household energy availability was calculated as the sum of energy available from foods acquired for consumption in and out of the home (see Smith and Aduayom 2003 for additional information on the methodology used). A household was considered energy deficient if its total household energy availability was lower than its total energy requirements (calculated using WHO 1985 recommended intakes (60); and using energy requirements specific to each household member, based on his/her age and gender distribution, and using a "light" activity level). The percentage of people who are food energy deficient is then calculated as the percentage of sample individuals who live in food energy deficient households, with appropriate corrections for survey sampling designs.

Source: Smith and Aduayom 2003.