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**ARE URBAN POVERTY AND UNDERNUTRITION GROWING?
SOME NEWLY ASSEMBLED EVIDENCE**

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ABSTRACT

The population of the developing world is becoming more urban. Are poverty and undernutrition beginning to relocate to urban areas as well? We use survey data on poverty (from 8 countries) and on child undernutrition (from 14 countries) to address this question. Using data from the past 15-20 years, we find that in a majority of countries the absolute number of poor and undernourished individuals living in urban areas has increased, as has the share of poverty and undernourishment coming from urban areas. Given these trends and the current stock of knowledge as to the levels, determinants, and solutions to urban poverty and undernutrition, we argue for more research on these issues.

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1. INTRODUCTION

Over the period 2000-2025, the rural population of the developing world is projected to increase from 2.92 billion to 3.09 billion. Over the same period the urban population of the developing world is projected to almost double—from 1.99 billion to 3.73 billion (United Nations 1998). Caveats to these projections abound,¹ nevertheless the numbers are striking. As Table 1 indicates, over the period 2000-2025, the urban population of Africa as a whole is expected to increase from 310 million to 752 million (the rural population is projected to increase from 510 to 702 million); for Asia, the urban population will increase from 1.39 billion to 2.51 billion (the rural population is projected to decline slightly from 2.30 to 2.28 billion); and for Latin America, the corresponding numbers show an increase in the urban population from 388 million to 566 million (the rural population is projected to decline from 127 to 123 million).

For those who produce and use food policy research, these numbers raise several issues that we will attempt to address in this paper. First, while we can be sure that the number of people living in urban areas in the developing world will increase rapidly in the next 25 years, we do not know how many of them will be poor and undernourished. The absolute number of urban poor and undernourished will increase unless urban poverty incidence and undernutrition prevalence rates are reduced in direct proportion to the

¹ Two examples of these are to be found in UNHCS (1996, p. 14). First, the overall numbers are sensitive to different definitions of what is urban in large countries such as China, India and Brazil. Second, "urban" does not equal "city"—small market towns and administrative centers are important urban centers.

growth in urban populations. Second, will the absolute number of urban poor and undernourished increase more quickly than the rural number? In other words, will there be a shift of poverty and undernutrition from rural to urban areas?

This paper reviews available literature on these issues and presents newly assembled data that suggest that the absolute number of poor and undernourished in urban areas is increasing and is accounting for an increasing share of overall poverty and malnutrition.

2. IS THE LOCUS OF POVERTY AND MALNUTRITION CHANGING?

Many analysts believe that the locus of poverty and undernutrition is gradually shifting from rural to urban areas. Reliable numbers on the growth of urban poverty and undernutrition and their share in national poverty and undernutrition, however, are generally not available.² The following subsections outline the debate on the rate and pattern of change in the locus of poverty and undernutrition.

POVERTY

Stren (1995) notes that urban poverty is one of the most important themes addressed by the second phase of the large Ford Foundation-supported project entitled the "Global Urban Research Initiative." Yet, as UNCHS (1996, p.109) states, "There are no

² For example, the World Bank (1996) states, "current estimates of the number of the poor indicate that poverty remains a rural phenomenon. But future projections show that the number of urban poor will exceed the number in rural areas by early next century" (p. vii) but provides no basis for this statement.

accurate figures for the proportion of the world's population living in absolute poverty in urban areas. Estimates have been made for the number of "poor" people living in urban areas in the South, based on per capita income. They vary from an estimate made in 1989 of 130 million of the South's 'poorest poor' living in urban areas to an estimate for 1988 made by the World Bank of 330 million people." The UNCHS report goes on to state that "neither of these figures can be reconciled with the many national studies or studies of particular urban centers which show that a third to a half of a nation's urban population...have incomes too low to allow them to meet human needs" (p. 109).

Popkin and Bisgrove (1988) cite some World Bank projections reported in Churchill (1980), which indicate that by 2000, the number of poor urban households will outnumber the number of poor rural households.³ The original document by Churchill (1980) is not explicit about how the numbers were compiled. It is clear, however, that survey data are not used to construct the estimates.

ILO estimates by Tabatabai (1996) provide an extensive source of rural and urban poverty incidence estimates from survey data from other sources. However, although the estimates are based on household surveys, and use an absolute poverty line, there is little to help the researcher assess whether the data are of good quality and whether the estimates are comparable over space and time in terms of cost of living. Other researchers have faced the same constraints. Naylor and Falcon (1995) bring together poverty data

³ Note that because urban households tend to be smaller than rural households, the number of individuals living in poverty under these projections for the year 2000 may be greater in rural than in urban areas.

for a number of countries over time, and de Haan (1997) does so for a cross-section of countries. But, as Naylor and Falcon note "each (data) line in the tables is the subject of controversy." They conclude that "Although the numbers of urban poor may still be fewer than those in rural locations, urban poverty is now at a scale where much more attention needs to be devoted to its analysis" (p. 517). Similarly, de Haan (1997) summarizes (p. 3): "There seems to be a consensus that urban poverty increased during the 1980s...but there is little reliable data to substantiate this."

When survey data are available, comparisons of urban and rural poverty remain contentious for a number of well-known reasons, which include rural/urban differences in the consumption bundles, food and nonfood prices and the visibility of income-generating activities, as well as the difficulty of including the homeless and other highly mobile urban populations in survey sampling frames and changing definitions of urban and rural areas over time.

CHILDHOOD MALNUTRITION, MORBIDITY, AND MORTALITY

Urban/rural comparisons of childhood mortality, anthropometry, and morbidity from infectious diseases are not burdened with many of the difficulties described above. Valid comparisons between urban and rural populations can be made using these child outcomes without any adjustment for differences in the cost of living or of other conditions.

Various reviews of urban/rural differences in childhood mortality (Viteri 1987; Gilbert and Gugler 1992; Ruel et al. 1998), malnutrition (Hussain and Lundven 1987; von Braun et al. 1993; Ruel et al. 1998), and morbidity (Viteri 1987; Ruel et al. 1998) have been carried out since the late 1970s. The findings are consistent in showing that childhood mortality rates, and the prevalences of stunting (low height-for-age) and underweight (low weight-for-age) are generally lower in urban compared to rural areas. Much less consistent patterns are found for differences in the prevalence of wasting (low weight-for-height) and morbidity rates from infectious diseases, which in some countries are greater in urban than in rural areas. These data are suggestive of a pattern of more acute and infection-related malnutrition in urban areas (resulting in wasting), compared to a more chronic and food insecurity-related type of malnutrition (resulting in stunting) in rural areas. Although no empirical data exist to support this hypothesis, the contaminated and unhygienic conditions of slums do support the proposition that infectious diseases are a key health problem in urban areas, which is likely to disproportionately affect the youngest, more vulnerable children.

It is thought that urban populations exhibit more variation in poverty, morbidity, mortality, and nutritional status compared to rural populations (Basta 1977; Bradley et al. 1992). If true, we need to be careful about rural/urban comparisons of means. We analyzed demographic health survey (DHS) data from 11 countries to verify these facts using the prevalence of stunting as indicator of malnutrition. Our results, reported in Table 2, show that, except for Brazil, the ratio of stunting prevalence between poorer

versus wealthier quintiles is greater within urban than within rural areas. Differences between low and high socioeconomic status groups in urban areas are also consistently larger than the urban/rural differentials. Although prevalences of stunting among the lowest socioeconomic group in urban areas are always lower than among the poorest groups in rural areas, the gap is often relatively small. Thus, urban/rural comparisons of child morbidity, mortality, and undernutrition may be misleading and should be interpreted with caution.

Data to analyze *trends* in rural/urban comparisons of child malnutrition, morbidity or mortality are scarce. Although several countries have nationally representative data sets available at more than 1 point in time, differences in reporting by age groups makes trend analysis based on reported anthropometric data impossible for many (Ruel, Morris, and Barquera-Cervera 1997).

NEWLY ASSEMBLED POVERTY AND UNDERNUTRITION DATA

The previous two sections point to some of the difficulties in using readily available data to answer the questions: (1) are the absolute numbers of poor people and underweight young children living in urban areas increasing,⁴ and (2) do they represent an increasing share of the total poor and underweight young children?

⁴ The prevalence of underweight, as opposed to stunted children, was examined because data on height-for-age were usually not available in the data sets used. We recognize, however, the limitations of underweight data, which do not allow to differentiate between stunting (low height-for-age) and wasting (low weight-for-height).

We attempted to overcome these difficulties—at least in part—by seeking assistance from colleagues at the World Bank and the World Health Organization in order to get access to poverty and malnutrition data disaggregated into rural and urban areas for a number of countries over at least two points in time. From the available data, we selected 8 countries with the most credible rural and urban headcount poverty incidence at two points in time. Similarly, from the data that WHO was able to provide us, we selected 14 countries with the most comparable rural and urban underweight prevalence numbers at two points in time.

The poverty data were assembled in large part from World Bank poverty assessments and the underweight data were assembled from WHO's Global Database on Child Growth and Malnutrition (WHO 1997). Tables 3 and 5 document the data sources and assumptions made.

Poverty Data

The poverty data we collected were categorized in Table 3 by a number of characteristics to provide the reader with a sense of the robustness of the poverty comparisons over time. All the data come from household surveys. The categories include whether the data (1) are nationally representative, (2) have used absolute poverty lines adjusted for changes in cost of living over time, (3) have used absolute poverty lines adjusted for regional (or at least urban/rural) cost of living, and (4) whether the same areas are defined as rural and urban over time. The data that were selected for use are the data

we have the most confidence in based on a careful reading of the background documents listed in Table 3.⁵

The results of Table 3 are summarized in Table 4. The 8 countries selected account for approximately two-thirds of the developing world's people. The data show that in 5 out of 8 countries, the absolute number of urban poor and the share of poor people living in urban areas are increasing over time (Bangladesh, China, Ghana, India, and Nigeria). For 7 of the 8 countries the share of poor people in urban areas is increasing. The only country for which the share of poor people in urban areas was decreasing was Indonesia over the 1990-93 period. It seems that even in these relatively short periods poverty is increasing in absolute and relative importance in these large countries.⁶

The country with the most credibly comprehensive data on rural and urban differences in poverty rates is India, which has comparable consumption survey data over a period of 40 years. The rural and urban poverty trends and numbers for countries as large as India tell us an important story on the relocation of poverty. The results presented in Figure 1 clearly show that the number of poor rural individuals (as classified by the headcount index) was flattening out in the 1970s, with the numbers of urban poor

⁵ Note that even for these reports, many of them do not indicate what is happening to the definition of rural and urban over time. In addition, note that when poverty incidence was presented for more than one poverty line, we consistently chose the upper poverty line.

⁶ A similar analysis was carried out with data from 12 countries from Latin America for which we did not have sufficient information as to whether cost of living adjustments were made over time to include in this table. The findings, however, are consistent: both the share of urban poverty and the absolute number of urban poor increased between the eighties and the nineties in 11 of the 12 countries for which data were available. The exception was Chile.

catching up over the 1980s and 1990s, as reflected by an increasing share of the poor living in urban areas.

NUTRITION DATA

In terms of prevalence of underweight children, the data in Table 5 show that for 12 out of 16 country spells, the absolute number of underweight children in urban areas is increasing and at a faster rate than the numbers in rural areas. For 10 out of the 16 country spells, both the absolute number of underweight children in urban areas and the share of underweight children in urban areas are increasing. This latter set of country spells constitutes a large percent of the developing world, given that it contains China, Bangladesh, Nigeria, Egypt, and the Philippines. Only China, Bangladesh, and Nigeria overlap from the poverty and underweight children data sets, and they show the same pattern in urban poverty as they do in urban underweight. These results are summarized in Table 6.

Hence, for a majority of the countries listed in Tables 3 and 5, we can say (1) the number of urban poor is increasing, (2) the share of the urban poor in overall poverty is increasing, (3) the number of underweight preschoolers in urban areas is increasing, and (4) the share of urban preschoolers in overall numbers of underweight preschoolers is increasing. The locus of poverty and undernutrition does seem to be changing from rural to urban areas, at least based on the data we have presented.

3. WHY IS MORE RESEARCH NEEDED ON URBAN POVERTY, FOOD INSECURITY AND UNDERNUTRITION?

The above demographic trends will force governments and civil society to rethink their approach to urban poverty, food insecurity and undernutrition. For example, Maxwell (1998) argues that many governments in Sub-Saharan Africa persist in thinking about urban food insecurity primarily in terms of aggregate food supply to the cities, rather than the ability of poor households in urban areas to purchase food. There is already evidence of an increase in the demand for research that can provide an empirically sound basis for policy and program formulation in urban areas.⁷ What about the supply of that research?

There are of course important research efforts on urban issues. The following subjects are summarized in the following documents: urban development in general (Stren and Bell 1995; McCarney 1996); urban food security and nutrition (Atkinson 1992, 1993a; UNICEF 1994; Pryer and Crook 1990; von Braun et al. 1993); urban livelihood security and coping strategies (Pryer, 1999; Moser 1996); urban nutrition (Solomons and Gross 1995; Popkin and Bisgrove 1988); urban poverty (de Haan 1997; Naylor and Falcon 1995; *Environment and Urbanization* 1995a, 1995b); urban health (Atkinson 1993b); urban agriculture (UNDP 1996; Egziabher et al. 1994); and street foods (Tinker

⁷ For example, CARE International USA, the large Private Voluntary Organization, is already organizing a series of urban livelihood studies in a number of countries to assist in urban programming for the next 10 years.

1997). Why, then, is more research needed on urban poverty and undernutrition? We argue that the supply of this information is constrained in several important ways.

First, quantity: there is surprisingly little research on urban poverty, food insecurity and malnutrition. The references above constitute practically all the most important syntheses of research available in recent years. Perhaps this lack of quantity reflects a reluctance to be labeled "anti-rural" at a time when the majority of poverty is still experienced in the rural areas of the developing world. Typical of this approach is the *World Development Report* of 1990 (World Bank 1990). The *Report* does not consider urban poverty much of a priority. Little space is devoted to it based on lower poverty incidences in urban areas in the 1980s.⁸ The report summarizes the evidence as suggesting that "urban areas do offer more opportunities for higher paid work, and this implies that, on balance, urbanization helps to reduce poverty" (p. 30). Alternatively, this research vacuum could simply reflect a lack of awareness of the growing urban problems.

Second, the studies do not provide enough integration across economic, social, and nutrition factors in an urban setting. For example, in generating an empirical basis for policy formulation around female employment issues, we are not only interested in how female employment affects women's income generation, but also how it affects street food purchases, the number of children living on the street, the quality of caregiving to young children, the school enrollment rates of older children, new types of household living arrangements, the health status of mothers, and the nutrition status of children.

⁸ See Table 2.2, p. 31 of that document.

Third, many of the studies generate and utilize rich case-study data. But these studies are frequently limited in terms of the general conclusions that they can draw for other areas of the city or the city as a whole. Often they do not integrate or compare and contrast their findings with those from other cities. Consequently, they may miss opportunities to develop more complex insights about commonalities and differences of urban problems across settings.

Fourth, few studies explore the dynamics of urban poverty or its links to rural poverty. For instance, very few studies actually track an urban household over time to understand how households construct strategies and deal with shocks as they move in and out of poverty. Nor do many studies compare similar rural and urban households to understand how households establish themselves in an urban area or how rural and urban livelihood strategies differ.

Fifth, *intra*-urban differences are not sufficiently highlighted. Too often, all urban households—rich and poor—are averaged out to provide one single estimate of poverty or malnutrition. In countries with high income and social inequalities this can be particularly misleading.

Finally, individual, household, community, NGO, and government responses to urban poverty and malnutrition have not been systematically evaluated with an eye to producing a distilled set of best practices. The 1994 report by UNICEF represents one of the few attempts to evaluate program experiences in urban areas and draw cross-country conclusions, but much more can be done to understand the nature of urban poverty, food

insecurity and malnutrition, their determinants, and the successful and unsuccessful responses to it (UNICEF 1994). For example, the recent World Bank (1996) summary of its own antipoverty experiences over the 1990-1995 period states that "urban poverty is emerging as one of the most serious challenges facing the world as we move toward the twenty-first century" (p. viii), but the ensuing discussion of antipoverty approaches does not distinguish between rural and urban areas in terms of strategy or tactic.

4. CONCLUSIONS

Over the period 2000-2025, the rural population of the developing world is projected to be relatively constant in total, while the urban population is projected to double over that same period. But will this population shift from rural to urban be accompanied by a corresponding shift in poverty and child undernutrition? Using the best available survey data from WHO and the World Bank, we find that for a majority of countries not only has the absolute number of the urban poor and undernourished increased in the last 15-20 years but they have done so at a rate that outpaces corresponding changes in rural areas: in other words, the share of the poor and undernourished that come from urban areas is increasing. Concerns about the quality of the available data notwithstanding, we argue that this implies that more policy research needs to be conducted on the levels, determinants, and solutions for urban poverty and malnutrition. The few studies that are available provide an important starting point for a new wave of research into urban deprivation. It is not inevitable that urban poverty and

malnutrition will increase in the developing world over the next 20 years, and it is our view that the generation of increased knowledge about the magnitude and nature of the problem together with the analysis of the urban policy successes and failures will help to stem and perhaps even reverse this trend.

TABLES

Table 1: Changes in urban and rural populations by region, 1975-2025

Region/Country	Level of urbanization (% of total population in urban settlements)			Urban Population			Rural Population		
				(millions)			(millions)		
	1975	2000	2025	1975	2000	2025	1975	2000	2025
World	37.8	47.4	58.9	1,543	2,890	4,736	2,538	3,201	3,303
More developed regions	69.9	76.1	82.6	733	903	1,008	315	284	213
Less developed regions	26.7	40.5	54.7	809	1,986	3,729	2,223	2,918	3,090
Africa	25.2	37.8	51.7	104	310	752	310	510	702
Asia	24.6	37.6	52.4	593	1,387	2,508	1,813	2,302	2,277
Latin America and Caribbean	61.2	75.4	82.1	196	388	566	124	127	123

Source: United Nations 1998.

Table 2: A comparison of the magnitude of rural/urban, within-urban and within-rural differences in the prevalence of stunting using DHS data

Country/year	Rural/urban differences			Within-urban differences			Within-rural differences		
	Rural	Urban	Rural to urban ratio	Low SES ^a	High SES	Low to high SES ratio	Low SES	High SES	Low to high SES ratio
Asia									
Bangladesh 93	56.6	40.5	1.39	56.4	20.5	2.75	63.8	40.5	1.57
Pakistan 91	54.8	40.9	1.34	54.3	23.6	2.30	62.0	52.5	1.18
Africa									
Tanzania 91/92	48.1	28.5	1.69	45.2	21.8	2.07	50.6	42.0	1.20
Ghana 93	30.1	15.7	1.92	21.6	6.4	3.38	32.2	23.3	1.38
Senegal 92/93	26.5	15.3	1.73	22.1	8.7	2.54	36.0	29.5	1.22
Zambia 92	46.6	32.5	1.43	36.9	19.6	1.88	55.0	34.7	1.58
Latin America									
Brazil 96	19.0	7.8	2.44	15.3	3.6	4.25	34.6	6.6	5.24
Colombia 95	19.2	12.6	1.52	19.5	5.7	3.42	23.1	14.0	1.65
Dominican Republic 91	26.3	14.6	1.80	23.2	2.9	8.00	36.6	14.5	2.54
Peru 92	53.4	25.9	2.06	36.4	5.5	6.62	57.1	33.9	1.68
Guatemala 95	56.8	35.5	1.60	58.0	16.7	3.47	62.1	33.1	1.87

^a A socioeconomic index based on data available in DHS data sets on quality of housing and household assets was created separately for rural and urban areas in each country using principal components analysis. The factor scores obtained were ranked to divide the sample in socioeconomic status (SES) quintiles. Low and high SES in this table refer to the 1st and 5th quintile.

Table 3: Changes in urban and rural poverty over time, 8 selected countries

Country	Survey Year	Urban Poverty incidence (Headcount index)	Rural poverty incidence (Headcount index)	Percent of poor in urban areas (b)	Number of urban poor ('000s) (a)	Source for poverty incidence and percent of poor in rural areas	Nationally Representative?	Absolute poverty line adjusted for regional cost of living?	Consumption adjusted for cost of living changes over time	Comparison of rural and urban definitions over time	Comments
Bangladesh	1983/4	50.78	60.36	11.48	6,737	Wodon 1995	yes	yes	yes?	?	Upper poverty line reported here
Bangladesh	1991/92	45.24	62.96	11.78	7,781	Wodon 1995	yes	yes	yes?	?	Upper poverty line reported here
Colombia	1978	12.1	38.4	35.83	2,052	Colombia Poverty Assessment (World Bank 1994)	national coverage only	yes	yes (although rural adjusted based on urban CPI)	constant	Upper poverty line reported here
Colombia	1992	8.0	31.2	37.41	1,825	Colombia Poverty Assessment (World Bank 1994)	national coverage only	yes	yes (although rural adjusted based on urban CPI)	constant	Upper poverty line reported here
Nigeria	1985/6	31.7	49.5	22.12	8,092	Canagarajan et. al. 1997	yes	yes	yes	?	Upper poverty line reported here
Nigeria	1992/3	30.4	36.4	31.03	10,234	Canagarajan et. al. 1997	yes	yes	yes	?	Upper poverty line reported here
Indonesia	1990	10.3	23.1	16.42	5,760	calculated from Mason and Baptist 1996	yes	yes	yes	?	Upper poverty line reported here
Indonesia	1993	5.2	16.5	14.74	3,637	calculated from Mason and Baptist 1996	yes	yes	yes	?	Upper poverty line reported here
India	1977/8	40.5	50.6	19.34	64,335	Datt 1998	yes	yes	yes	?	
India	1993/4	30.51	36.66	23.34	75,932	Datt 1998	yes	yes	yes	?	

(continued)

Table 3 (continued)

Country	Survey Year	Urban Poverty incidence (Headcount index)	Rural poverty incidence (Headcount index)	Percent of poor in urban areas (b)	Number of urban poor (000s) (a)	Source	Nationally Representative	Absolute poverty line adjusted for regional cost of living	Consumption adjusted for cost of living changes over time	Comparison of rural and urban definitions over time	Comments
China	1988	6.7	32.7	6.78	20,281	Khan 1998	yes	yes	yes	?	Upper (standard) poverty line used from Table 9 and Table 13 of Khan 1998.
China	1995	8.0	28.6	10.80	29,498	Khan 1998	fewer provinces included, but national representativeness a goal	yes	yes	?	Upper (standard) poverty line used from Table 6 and Table 10 of Khan 1998.
Pakistan	1984/5	38.2	49.3	24.76	11,522	World Bank Pakistan Poverty Assessment 1995	yes	rural/urban	yes	?	Upper poverty line reported here
Pakistan	1991	28.0	36.9	26.21	10,635	World Bank Pakistan Poverty Assessment 1995	yes	rural/urban	yes	?	Upper poverty line reported here
Ghana	1987/88	27.3	41.9	23.73	1,132	calculated from Coulombe and McKay 1995	yes	yes	yes	?	Upper poverty line reported here
Ghana	1992/3	26.5	33.9	28.59	1,348	calculated from Coulombe and McKay 1995	yes	yes	yes	?	Upper poverty line reported here

Note: The full spreadsheet is given as Appendix Table 7.

^a Number of urban poor is derived from multiplying the percent of the urban population in poverty (as measured by the headcount index) by the population of individuals in urban areas from UN Population Division's 1998 report on World Urbanization Prospects: The 1996 Revision (UN 1998). The same calculation was made for the number of rural poor. The population year was matched up as closely as possible to the survey year.

^b Percent of poor in urban areas calculated from the number of urban poor and rural poor calculated as described in note (a) above.

Table 4: Summary of poverty results from Table 3

	<i>Absolute number of urban poor increasing</i>	<i>Absolute number of urban poor decreasing</i>
<i>Share of urban poor increasing</i>	Bangladesh 83-92 China 88-95 Ghana 87-93 India 77-94 Nigeria 85-93	Pakistan 84-91 Colombia 78-92
<i>Share of urban poor decreasing</i>		Indonesia 90-93

Table 5: Changes over time in urban and rural prevalence of underweight children, 14 selected countries

Country	Survey Year	Survey Type (in WHO 1997)	WHO Global database reference number	Reported age range (years)	Urban underweight prevalence ^a	Number of underweight children in urban areas (000s) ^b	Rural underweight prevalence ^a	Percent of all underweight children in urban areas
Bangladesh	1985/6	Gov	369	0.5-4.99	62.3	1,057.96	72	9.70
Bangladesh	1989/90	Gov	370	0.5-4.99	62.7	1,380.40	66.7	12.33
Bangladesh	1996/7	DHS	1759	0-4.99	43.6	1,207.18	57.9	11.89
Brazil	1989	Gov	234	0-4.99	5.5	675.03	10.3	55.39
Brazil	1996	DHS	1680	0-4.99	4.6	567.54	9.2	58.55
China	1992	Gov	1647	0-4.99	6.5	1,554.39	20.0	7.78
China	1996	MICS	1676	0-4.99	10.0	2,839.17	18.0	14.88
Egypt	1990	PAPCHILD	442	0-4.99	7.0	219.97	12.1	26.71
Egypt	1992/3	DHS	1408	0-4.99	7.1	230.20	11.6	28.33
Egypt	1995/6	DHS	1665	0-4.99	9.9	320.98	14.1	31.20
Honduras	1987	Gov	457	0-4.99	10.6	24.95	25.3	16.83
Honduras	1993/4	Gov	1614	0-4.99	10.8	37.67	23.4	22.05
Madagascar	1992	DHS	878	0-4.99	34.0	156.41	42.0	16.86
Madagascar	1995	MICS	1611	0-4.99	30.8	189.94	35.1	20.39
Malawi	1992	DHS	1409	0-4.99	15.8	34.47	29.0	6.50
Malawi	1995	MICS	1700	0-4.99	24.8	63.56	30.3	10.80
Mauritania	1990/1	PAPCHILD	444	0-4.99	44.3	69.45	49.8	40.24
Mauritania	1995/6	MICS	1662	0-4.99	19.5	39.62	27.2	41.65
Nigeria	1990	DHS	377	0-4.99	26.0	1,496.70	38.1	23.29
Nigeria	1993	Gov	1713	0.5-5.99	35.30	2,557.90	41.0	31.81
Peru	1991/2	DHS	363	0-4.99	6.4	115.09	17.6	38.01
Peru	1996	DHS	1757	0-4.99	3.9	76.74	13.7	34.82
Philippines	1987	Gov	417	0-4.99	30.8	1,214.87	34.1	42.48
Philippines	1993	Gov	1510	0-4.99	28.3	1,296.92	30.9	48.14
Tanzania	1991/2	DHS	473	0-4.99	25.2	240.45	29.9	16.75
Tanzania	1996	DHS	1752	0-4.99	19.6	261.08	33.0	14.75
Uganda	1988/9	DHS	95	0-4.99	12.6	44.01	24.0	5.78
Uganda	1995	DHS	1648	0-3.99	15.3	71.77	26.8	7.05
Zambia	1992	DHS	414	0-4.99	20.8	129.28	29.0	35.53
Zambia	1996/7	DHS	1756	0-4.99	16.5	113.02	28.0	32.04

Notes: The weakest link in this series of calculations is the estimates provided for the numbers of children under 5 by rural and urban regions. Post 1990, we are forced to rely on projections, not current estimates, because the UN stopped publishing data by age by rural/urban, after the document, United Nations (1993). Underweight is defined as weight-for-age < -2 Standard Deviation compared to the reference standards. The full spreadsheet is provided in Appendix Table 8.

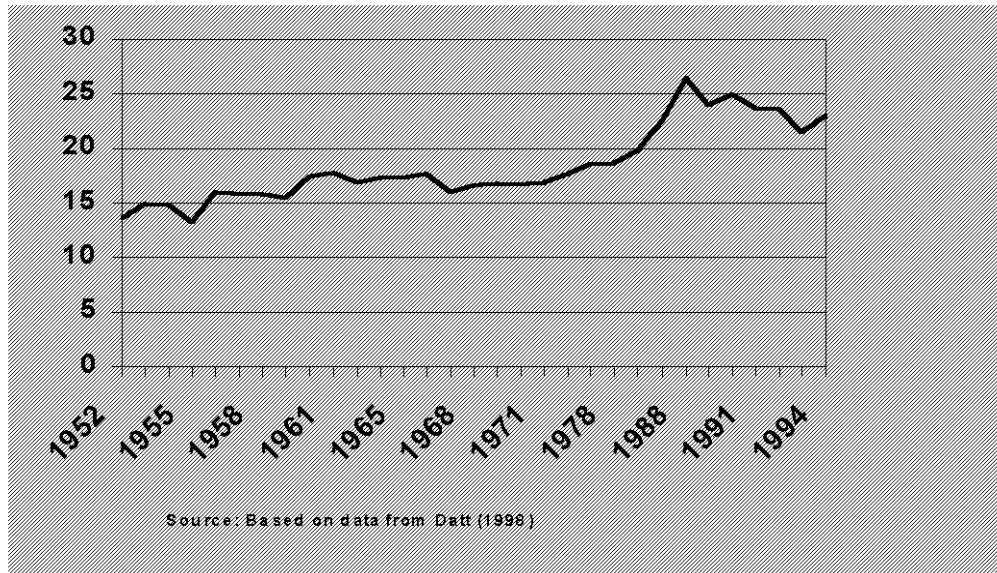
^a Source is the WHO Global Database on Child Growth and Malnutrition (WHO 1997).

^b The number of underweight children in urban areas is calculated as the percent of the urban population between 0 and 4.99 years of age (from United Nations 1993) x the number of individuals in urban areas (United Nations 1998) x the prevalence of underweight in urban areas. The population year was matched up as closely as possible to the survey year.

Table 6: Summary of underweight children results from Table 5

	<i>Absolute number of urban underweight children increasing</i>	<i>Absolute number of urban underweight children decreasing</i>
<i>Share of urban underweight children increasing</i>	Bangladesh, 85-96 China 92-95 Egypt, 90-92 Egypt, 92-95 Honduras 87-94 Madagascar 92-95 Malawi 92-95 Nigeria 90-93 Philippines 87-93 Uganda 88-95	Brazil 89-96 Mauritania 90-96
<i>Share of urban underweight children decreasing</i>	Tanzania 91-96	Bangladesh, 89-96 Peru 91-96 Zambia 92-97

Figure 1: Share of poverty from urban areas: India, 1952-94 (percent)



APPENDIX

Appendix Table 7: Rural and urban poverty data, selected countries

Country	Survey year	Rural	Population year	Rural	Number of rural ('000s)	Urban	Urban population ('000s)	Number of urban ('000s)	Share of poor in urban areas
		poverty incidence		poverty incidence		poverty incidence			
		(percent)			(percent)				
Bangladesh	1983.5	60.36	1985	86,043	51,936	50.78	13,267	6,737	11.48
Bangladesh	1991.5	62.96	1990	92,565	58,279	45.24	17,200	7,781	11.78
China	1988	32.7	1990	852,600	278,800	6.7	302,705	20,281	6.78
China	1995	28.6	1995	851,501	243,529	8	368,723	29,498	10.80
Colombia	1978	38.4	1980	9,568	3,674	12.1	16,957	2,052	35.83
Colombia	1992	31.2	1990	9,785	3,053	8	22,811	1,825	37.41
Ghana	1987.5	41.85	1985	8,691	3,637	27.3	4,146	1,132	23.73
Ghana	1992.5	33.9	1990	9,932	3,367	26.5	5,087	1,348	28.59
India	1977.5	50.6	1980	530,005	268,183	40.5	158,851	64,335	19.35
India	1993.5	36.66	1995	680,129	249,335	30.51	248,875	75,932	23.34
Indonesia	1990	23.1	1990	126,889	29,311	10.3	55,923	5,760	16.42
Indonesia	1993	16.5	1995	127,513	21,040	5.2	69,947	3,637	14.74
Nigeria	1985	49.5	1985	57,541	28,483	31.7	25,527	8,092	22.12
Nigeria	1992.5	36.4	1990	62,489	22,746	30.4	33,664	10,234	31.03
Pakistan	1984.5	49.3	1985	71,034	35,020	38.2	30,162	11,522	24.76
Pakistan	1991	36.9	1990	81,159	29,948	28	37,982	10,635	26.21
Pakistan	1991	36.9	1990	82,905	30,592	28	39,029	10,928	26.32

Appendix Table 8: Rural and urban underweight data, selected countries

Country	Survey year	Population year	Percent urban population				Percent rural population				Low WA 0-4.99 years rural ('000s)	Share of low WA in urban areas (percent)	
			0-4.99 years (1992 revision)	Urban population 1996 revision (millions)	Urban population 0-4.99 years ('000s)	Prevalence low WA urban (percent)	Low WA 0-4.99 years urban ('000s)	0-4.99 years (1992 revision)	Rural population 1996 revision (millions)	Rural population 0-4.99 years ('000s)			Prevalence low WA rural (percent)
Madagascar	1992	1990	15.5	2.968	460.04	34	156.4	19.1	9.614	1836.27	42	771.2	16.86
Madagascar	1995	1995	15.7	3.928	616.70	30.8	189.9	19.3	10.945	2112.39	35.1	741.4	20.39
Malawi	1992	1990	19.8	1.102	218.20	15.8	34.47	20.8	8.228	1711.42	29	496.3	6.50
Malawi	1995	1995	19.7	1.301	256.30	24.8	63.56	20.7	8.372	1733.00	30.3	525.1	10.80
Mauritania	1990.5	1990	18	0.871	156.78	44.3	69.45	18.3	1.132	207.16	49.8	103.1	40.24
Mauritania	1995.5	1995	18.2	1.1165	203.20	19.5	39.62	18.4	1.109	204.06	27.2	55.50	41.65
Nigeria	1990	1990	17.1	33.664	5756.54	26	1496.70	20.7	62.489	12935.22	38.1	4928.23	23.29
Nigeria	1993	1995	16.4	44.184	7246.18	35.3	2557.90	19.8	67.537	13372.33	41	5482.65	31.81
Peru	1991.5	1990	12.1	14.862	1798.30	6.4	115.09	15.9	6.708	1066.57	17.6	187.72	38.01
Peru	1996	1995	11.8	16.676	1967.77	3.9	76.74	15.3	6.855	1048.82	13.7	143.6	34.82
Philippines	1987	1990	13.3	29.657	3944.38	30.8	1214.87	15.5	31.122	4823.91	34.1	1644.95	42.48
Philippines	1993	1995	12.5	36.662	4582.75	28.3	1296.92	14.5	31.177	4520.67	30.9	1396.89	48.14
Tanzania	1991.5	1990	18	5.301	954.18	25.2	240.45	19.8	20.182	3996.04	29.9	1194.81	16.75
Tanzania	1996	1995	18.3	7.279	1332.06	19.6	261.08	20.1	22.747	4572.15	33	1508.81	14.75
Zambia	1992	1990	20.5	3.032	621.56	20.8	129.28	19.3	4.192	809.06	29	234.63	35.53
Zambia	1996.5	1995	19.7	3.477	684.97	16.5	113.02	18.6	4.604	856.34	28	239.78	32.04
Uganda	1988.5	1990	18.8	1.858	349.30	12.6	44.01	20.2	14.791	2987.78	24	717.0	5.78
Uganda	1995	1995	19	2.469	469.11	15.3	71.77	20.5	17.22	3530.10	26.8	946.07	7.05
Bangladesh	1985.5	1985	12.8	13.267	1698.18	62.3	1057.96	15.9	86.043	13680.84	72	9850.20	9.70
Bangladesh	1989.5	1990	12.8	17.2	2201.60	62.7	1380.40	15.9	92.565	14717.84	66.7	9816.80	12.33
Bangladesh	1996/7	1995	12.8	21.631	2768.77	43.6	1207.18	16	96.598	15455.68	57.9	8948.84	11.89
China	1992	1990	7.9	302.705	23913.70	6.5	1554.39	10.8	852.6	92080.80	20	18416	7.78
China	1995	1995	7.7	368.723	28391.67	10	2839.17	10.6	851.501	90259.11	18	16246.64	14.88
Brazil	1989	1990	11.1	110.57	12273.27	5.5	675.03	14.1	37.432	5277.91	10.3	543.62	55.39
Brazil	1996	1995	9.9	124.624	12337.78	4.6	567.54	12.7	34.39	4367.53	9.2	401.81	58.55
Egypt	1990	1990	12.7	24.743	3142.36	7	219.9	15.8	31.57	4988.06	12.1	603.56	26.71
Egypt	1992.5	1995	11.7	27.711	3242.19	7.1	230.2	14.6	34.386	5020.36	11.6	582.36	28.33
Egypt	1995.5	1995	11.7	27.711	3242.19	9.9	320.9	14.6	34.386	5020.36	14.1	707.87	31.20
Honduras	1987	1985	14.9	1.58	235.42	10.6	24.95	18.7	2.607	487.51	25.3	123.34	16.83
Honduras	1993.5	1995	14.1	2.474	348.83	10.8	37.67	17.9	3.179	569.04	23.4	133.16	22.05

REFERENCES

- Atkinson, S. J. 1992. *Food for the cities: Urban nutrition policy in developing countries*. Urban Health Program, Health Policy Unit. London: Department of Public Health and Policy, London School of Hygiene and Tropical Medicine.
- Atkinson, S. J. 1993a. Urban-rural comparisons of nutrition status in the Third World. *Food Nutrition Bulletin* 14 (4): 337-340.
- Atkinson, S. J. 1993b. Urban health in the Third World: A guide to the literature. *Environment and Urbanization* 5 (2): 146-152.
- Basta, S. S. 1977. Nutrition and health in low-income urban areas of the Third World. *Ecology of Food and Nutrition* 6: 113-124.
- Bradley, D., C. Stephens, T. Harpham, and S. Cairncross. 1992. *A review of environmental health impacts in developing country cities*. Washington, D.C.: World Bank.
- Braun, J. von, J. McComb, B. Fred-Mensah, and R. Pandya-Lorch. 1993. *Urban food insecurity and malnutrition in developing countries: Trends, policies, and research implications*. Washington, D.C.: International Food Policy Research Institute.
- Canagarajan, S., J. Ngwafon, and S. Thomas. 1997. *The evolution of poverty and welfare in Nigeria, 1985-92*. Policy Research Working Paper. 1715. Washington, D.C.: World Bank.
- Churchill, A. A., 1980. *Shelter*. Poverty and Basic Needs Series. September 1980. Washington, D.C.: World Bank.

- Coulombe, H., and A. McKay. 1995. *An assessment of trends in poverty in Ghana 1988-1992*. PSP Discussion Paper 81. Poverty and Social Policy Department. Washington, D.C.: World Bank.
- Datt, G. 1998. Poverty in India, and Indian States: An update. Food Consumption and Nutrition Division Discussion Paper 47. International Food Policy Research Institute, Washington, D.C.
- Egziabher, A. G., D. Lee-Smith, D. G. Maxwell, P. A. Memon, L. J. A. Mougeot, and C. J. Sawio. 1994. *Cities feeding people*. Ottawa, Canada: International Development Research Centre (IDRC).
- Environment and Urbanization*. 1995a. Urban poverty: Characteristics, causes and consequences. Vol. 7, No. 1., April.
- Environment and Urbanization*. 1995b. Urban poverty II: From understanding to action. Vol. 7, No. 2, October.
- Gilbert, A., and J. Gugler. 1992. *Cities, poverty and development: Urbanization in the Third World*. Oxford: Oxford University Press.
- de Haan, A. 1997. Urban poverty and its alleviation. *IDS Bulletin*. Volume 28 (2).
- Hussain, A. M., and P. Lunven. 1987. Urbanization and hunger in the cities. *Food and Nutrition Bulletin* 9 (4): 50-61.
- Kelly, V., T. Reardon, B. Diagana, and A. Abdoulaye Fall. 1995. Impacts of devaluation on Senegalese households: Policy implications. *Food Policy* 20 (4): 299-313.

- Khan, A. 1998. Poverty in China in the period of globalization. New evidence on trend and pattern. Issues in Development Discussion Paper 22. International Labor Organization, Geneva.
- Mason, A. and J. Baptist. 1996. *How important are labor markets to the welfare of Indonesia s poor?* Policy Research Working Paper 1665. Washington, D.C.: World Bank.
- Maxwell, D. 1998. The political economy of urban food security in Sub-Saharan Africa. Food Consumption and Nutrition Division Discussion Paper No. 41. International Food Policy Research Institute, Washington, D.C.
- McCarney, P. (Ed.) 1996. *Cities and governance: New directions in Latin America, Asia and Africa*. Toronto, Canada: University of Toronto Press International.
- Moser, C. 1996. Confronting crisis. *A summary of household responses to poverty and vulnerability in four poor urban communities*. Environmentally Sustainable Development Studies and Monographs Series No. 7. Washington D.C.: World Bank.
- Naylor, R. L., and W. P. Falcon. 1995. Is the locus of poverty changing? *Food Policy* 20 (6): 501-518.
- Popkin, B. M., and E. Z. Bisgrove. 1988. Urbanization and malnutrition in low-income countries. *Food and Nutrition Bulletin* 10 (1): 3-23.
- Pryer, J., and N. Crook. 1990. *Cities of hunger. Urban malnutrition in developing countries*. Revised Edition. Oxford: OXFAM.

- Pryer, J. 1999. The Dhaka Urban Livelihoods Study. *World Development*.
- Ruel, M. T., J. L. Garrett, S. S. Morris, D. Maxwell, A. Oshaug, P. Engle, P. Menon, A. Slack, and L. Haddad. Urban challenges to nutrition security: A review of food security, health, and care in the cities. Food Consumption and Nutrition Division Discussion Paper 51. International Food Policy Research Institute, Washington, D.C.
- Ruel, M. T., S. S. Morris, and S. Barquera-Cervera. 1997. Trends in stunting: Is age an issue? In *Third Report on the World Nutrition Situation*, pp. 96–102. Geneva, Switzerland: UN ACC/SCN.
- Solomons, N., and R. Gross. 1995. Urban nutrition in developing countries. *Nutrition Reviews* 53 (4): 90-95.
- Stren, R. 1995. Major urban research themes for the 1990s: An introduction. In *Perspectives on the city*, Vol. 4, *Urban research in the developing world*, ed. R. Stren and J. K. Bell, pp. 1–18. Toronto, Canada: University of Toronto Press International.
- Stren, R., and J. K. Bell, eds. 1995. *Perspectives on the city*, Vol. 4, *Urban research in the developing world*. Toronto, Canada: University of Toronto Press International.
- Tabatabai, H. 1996. *Statistics on poverty and income distribution: An ILO compendium of data*. Geneva, Switzerland: International Labour Organization.
- Tinker, I. 1997. *Street foods: Urban food and employment in developing countries*. New York, NY: Oxford University Press.

- UNDP (United Nations Development Programme). 1996. *Urban agriculture: Food, jobs and sustainable cities*. New York.
- UNHCS. 1996. *An urbanizing world: Global report on human settlements, 1996*. Oxford, England: Oxford University Press.
- UNICEF (United Nations Children's Fund). 1994. *The urban poor and household food security. Policy and Project Lessons of how Governments and the Urban Poor Attempt to Deal with Household Food Insecurity, Poor Health and Malnutrition*. New York.
- United Nations. 1993. *Urban and rural areas by sex and age: The 1992 revision*. Department for Economic and Social Information and Policy Analysis. Population Division. ESA/P/WP/120. New York.
- United Nations. 1998. *World urbanization prospects: The 1996 revision*. Department for Economic and Social Affairs. Population Division. ST/ESA/SER.A/170. New York.
- Viteri, F. E. 1987. Nutrition-related health consequences of urbanization. *Food and Nutrition Bulletin* 9 (4): 33-59.
- WHO (World Health Organization). 1997. *The global database on child nutrition*. Geneva.
- Wodon. Q. 1995. A profile of poverty in Bangladesh: 1983-92. Poverty and Human Resources Division. October 23. World Bank, Washington, D.C. Photocopy.

World Bank. 1990. *World Development Report 1990*. New York: Oxford University Press.

World Bank. 1994. *Colombia poverty assessment*. Volume 1. August 8. Country Department III: Latin America and the Caribbean Region. Washington, D.C.

World Bank. 1995. *Pakistan poverty assessment*. Country Operations Division. South Asia Region. Report No. 14397-PAK. Washington, D.C.

World Bank. 1996. *Poverty reduction and the World Bank. Progress and challenges in the 1990s*. Washington, D.C.

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