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UNDP/UNCHS (Habitat)/World Bank

URBAN MANAGEMENT AND POVERTY REDUCTION

**URBAN POVERTY RESEARCH SOURCEBOOK
MODULE II: INDICATORS OF URBAN POVERTY**

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FOREWORD

This working paper has been prepared as part of the urban poverty reduction component of the Urban Management Programme, a joint undertaking of the United Nations Development Programme (UNDP), the United Nations Centre for Human Settlements (UNCHS), and the World Bank. The UMP represents a major cooperative and coordinated effort by the United nations family of organizations, together with external support agencies, to strengthen contributions that cities and towns in developing countries make toward economic growth, social development, and the alleviation of poverty. The Programme seeks to promote coherent urban policies, strengthen urban management, and enhance the provision of municipal services by harnessing the skills and strategies of regional networks of experts, communities, and public and private sector organizations. It does this primarily through its regional offices in Accra, Ghana; Cairo, Egypt; Kuala Lumpur, Malaysia; and Quito, Ecuador.

The Programme relies on two mutually supportive processes to facilitate capacity in its five theme areas of municipal finance and administration; urban infrastructure management; urban land management; urban environmental management; and urban poverty alleviation. These processes are:

> **City or Country Consultations** which bring together national and local authorities, the private sector, community representatives, and other stakeholders to discuss specific issues within the Programme's theme areas and propose reasoned solutions. Consultations are held at the request of a city or country and often provide a forum for discussion of a cross-section of issues.

> The development of **Regional Networks of Experts** in each of the five UMP theme areas, for the purpose of providing technical advice and cooperation.

The UMP core teams in Nairobi and Washington, D.C. support the regional programs and networks by conducting state-of-the-art research; identifying best practices; synthesizing lessons learned, and disseminating program-related materials.

ABSTRACT

The Urban Poverty and Social Policy in the Context of Adjustment (UPA) Study is a community-level research project in four cities within countries with contrasting experiences of economic crisis and reform - Guayaquil in Ecuador, Budapest in Hungary, Metro Manila in the Philippines, and Lusaka in Zambia. The research looks at the implications of economic crisis for poor urban communities, the constraints that limit the poor's capacity to respond to opportunities to reduce vulnerability and prevent increased impoverishment. The study was undertaken by the World Bank's Urban Development Division in collaboration with local women's research organizations. Financial support for the project was provided by the Netherlands Ministry of Development Cooperation, UNICEF, SIDA and the UNDP, UNCHS (Habitat), and World Bank Urban Management Programme.

Based on community panel data, the study used household surveys from 1978 and 1992 within low income communities. The analysis of trend data allowed an in-depth examination of changes in household characteristics, such as size, headship, structure and composition. The rich database for the research was generated through a three-tiered research methodology which involved a community survey, random sample survey, and sub-sample survey.

In response to the growing need to better understand the increasingly complex phenomena of urban poverty (i.e. who the poor are, where they work, what they do to survive and the constraints that they face), the *Urban Poverty Sourcebook* aims to provide a reference document which draws on the strengths of the UPA study. The *Sourcebook* aims to provide a reference document which draws on the strengths of the UPA study. The *Sourcebook* is a 2-volume series which provides the following instruments.

Module I: Sub-city Level Household Survey
This module presents the research methodology adopted in UPA which uses an integrated set of multi-level research tools to collect micro-level data at the community, household, and individual levels. The data are used to analyze the characteristics of urban poverty and vulnerability, and to examine coping strategies of households and individuals in a specific low-income urban community. The resulting Community Profile locates the specific study community within the city and links the data to aggregate data available at city or national urban level, of the kind gathered in Module II, below. The annexes provide sample data collection instruments useful in generating poverty-specific indicators.

Module II: Indicators of Urban Poverty
This module provides a review of selected indicators typically used to evaluate sectoral and project performance in poverty reduction. It incorporates indicators which were tested in the UPA study and emerged as significant indicators of urban poverty. The techniques described provide a means of rapid assessment of poverty at city, community, and household levels using primary data collected from sample surveys and/or from secondary sources such as labor force, household, and expenditure surveys.

ACKNOWLEDGEMENTS

I.   INTRODUCTION

Purpose

The Urban Poverty Research Sourcebook provides a conceptual framework and range of methods for undertaking research on urban poverty. Such research can contribute to several objectives:

- to measure and monitor the extent and distribution of urban poverty;
- to document its nature and causes;
- to understand household survival and coping mechanisms in the face of poverty;
- to assist in the design of policies and programmes to reduce poverty

The methods outlined in the *Sourcebook* are designed to guide the compilation of city/sub-city profiles that describe the characteristics, incidence, and distribution of poverty. These profiles draw upon both primary data collected by the investigator and available secondary data. City profiles can provide both a benchmark for the measurement of poverty and a resource for the design, implementation, management, monitoring, and evaluation of urban poverty reduction programs and projects. They can also contribute toward the preparation of national or regional poverty profiles and poverty assessments.

The methods described here are also suitable for more specific research. They can be used to explore and document, for example, the changing incidence and characteristics of poverty and vulnerability; the obstacles to poverty reduction; the coping mechanisms and survival strategies of the poor; and changing household structures and residence structures and residence patterns.

Several aspects of the approach advocated in this *Sourcebook* differ from, and complement, national-level poverty-focused surveys such as the World Bank's Living Standard Measurement Survey (LSMS) and Social Dimensions of Adjustment (SDA):

- the use of community panel data to provide longitudinal trend analysis;

- the deliberate and exclusive focus on *urban* poverty;

- multiple sub-city data levels (community, household and individual);

- community-level surveys to reflect the reality of the city as a spatially mapped network of economic, social, and political sub-systems;

- the use of samples of households within a particular spatial community to demonstrate the different effects and responses among groups sharing broadly similar economic situation, local history, and cultural background;

- collection of intra-household data to examine the differential effects of poverty, and the different responses of household members to economic and social change, according to age, sex, occupation, and reproductive and community managing responsibilities;

- a consultative research process, involving local participation in the definition, collection, analysis, and use of the information;

- a dissemination process undertaken through in-country consultations - specific research results are presented to different stakeholders and constituencies at the national, local, and community levels concerned with issues of urban poverty and the formulation of appropriate social policy

Poverty: Definitions and Issues

The definition and Measurement of poverty

Conventional definitions of poverty are based upon either per capita incomes or consumption. A poverty line is defined, based upon a minimum level of consumption, typically defined as the cost of a bundle of goods (both food and non-food) deemed to assure that basic consumption needs are met and below which survival is threatened (Ravallion, 1992).

Welfare indices. Income indices of poverty have the advantage of enabling fairly ready comparison of the incidence of poverty over time or between places. However, they overlook important aspects of human well being such as health, literacy, employment, and access to basic services such as housing, clinics, or schools. Over recent years, indices have been developed that take such components of welfare into account. UNDP, for example, utilizes a composite indicator consisting of three variables considered as the essential elements of human life - longevity, knowledge, and decent living standards. These are measured by life expectancy at birth, adult literacy, and per capita income respectively, which are combined into a single index, the Human Development Index (UNDP, 1990). As Dasgupta (1993) has pointed out, such composite indicators bring a wider range of factors into the measurement of human welfare; however, they still do not take into account such basic political and civil rights as political participation and justice.

Underlying causes. Welfare indices focus on the symptoms of poverty rather than its underlying causes and on flows of income rather than the distribution of assets. The characteristics of poverty - low incomes, poor health and illiteracy - however, are themselves the results of processes that have their roots in economic, social, political and cultural factors.

Who says we are poor? General definitions of poverty are applied to the poor by others, usually outsiders, who are not themselves poor. The very universality of such definitions means that they are external and imposed. To deny the poor the opportunity to define and articulate their own predicaments and aspirations is to portray them as passive (whether as 'victims' or 'target groups'), and to deny their active role in shaping their own and their communities' lives. It is also to deny ourselves the opportunity to learn from their experience. The approach advocated here is therefore to complement consumption-based definitions of poverty with the concepts of

welfare and deprivation offered by the poor themselves; these may include aspirations such as security, self-respect, and political voice.

Vulnerability

The concept of *vulnerability* captures some of the multidimensional, dynamic and structural aspects of poverty. Vulnerability denotes not simple lack or want, but "defenselessness, insecurity, and exposure to risk, shock and stress" (Chambers, 1989:1). While vulnerability is not a concept that has been rigorously defined or theorized, or for which generally accepted indicators exist, Swift (1989) analyzes vulnerability and security in terms of assets, which he classifies as investments, stores, and claims. Investments include both human investments in education and health and physical investments in housing, equipment, and land. Stores may be of food, money, or valuables. Claims include those on other members of the community, patrons and on government and the international community (see Moser, 1996).

Distributional issues

Urban areas are characterized by social and economic heterogeneity. A large range in the distribution of incomes, opportunities, and access to infrastructure, services, and political influence is typical. Simple city-wide averages of social indicators such as income or life expectancy may therefore be of limited value, telling us little about the conditions of life of either the rich or the poor. Even among the poor themselves, social conditions vary widely because of differences in modes of livelihood and access to resources.

Investigating the *distribution* of social and economic resources is therefore of central importance in any research on urban social conditions. Distribution has both spatial and social aspects (though the two will often overlap). Important social variables to be considered include gender, age, ethnicity, and caste. These variables are significant in determining access to social and economic indicators such as literacy, health status, and incomes.

The Characteristics of Urban Poverty and Vulnerability

Much of the debate about poverty and vulnerability has been concerned with the rural environment. But what is distinctive about *urban* poverty and vulnerability? The specific character of urban poverty may be related to three distinctive characteristics of urban life: commoditization, environmental hazard, and social fragmentation.

Commoditization. One set of risks faced by urban dwellers arises from their integration into the cash economy. Urban households are for the most part obliged to pay for their food and shelter (rather than rely on their own production), and may be more dependent upon purchasing services such as transportation and education than rural dwellers. Employment is frequently unavailable, insufficient, or insecure. Shelter is frequently illegal and insecure. Furthermore, sections of the urban poor may be particularly vulnerable to economic shocks, and to macroeconomic policy adjustments in prices, wages, and public expenditure, (World Bank, 1990).

Environmental hazard. The poor are disproportionately affected by urban environmental problems. Special characteristics of low-income communities include: (a) inadequate access to environmental services (water, sanitation, drainage, and solid waste management); (b) poor quality housing; (c) overcrowding; and (d) settlement on marginal or degraded land. These factors increase health risks to the poor, with corresponding economic costs for health care and lost or lowered productivity (Bartone et. al., 1994).

Social fragmentation. The vulnerability of urban dwellers may also be high because community and inter-household mechanisms for social security are less likely to operate in urban than in rural areas. Urban areas are often characterized by higher levels of violence, alcohol, and drug abuse, and greater risk of motor vehicle accidents.

Approaches to Urban Poverty Research

This *Sourcebook* advocates the use of a range of approaches to investigating urban poverty. The social sciences have a broad range of methods and techniques suitable for urban research. A useful way of classifying these is according to the degree of formality of research design. At the formal end of the spectrum are surveys with large, stratified samples with questionnaires. Less formal methods include participant observation, semi-structured interviews, group discussions, and case studies.

Each of these methods has its strengths and requires differing capacities, skills and resources. Table 1 summarizes, in simple and schematic fashion, some of the respective uses and characteristics of informal and formal methods. As the table suggests, the choice of method or methods used will depend upon research issues and objects, the existence of secondary data, and the availability of skills and resources.

Formal 'etic' methods. Formal methods are useful for obtaining quantitative information, which may be subjected to formal statistical tests of significance. They are suitable for obtaining the measured, "objective" outsider's or "etic" view (for example, measures of population, birth rates, wages). Such indicators have the strength of usually being quantifiable and easy to compare between individuals or classes of individuals.

Informal 'emic' methods. Informal research methods, on the other hand, are used to explore the actors' or 'emic' view. Such methods can document perceptions, attitudes, preferences, and priorities. Complex process and interactions between levels of social reality (for example between economic, political, and cultural factors), are often best investigated using informal research methods.

Table 1

FORMAL AND INFORMAL RESEARCH METHODS		
TYPE OF INFORMATION	**FORMAL**	**INFORMAL**
Type of data	Quantitative	Qualitative
Perspective of data	Etic (outsider)	Emic (insider)
Suitability for generating data on:		
Aggregate poverty indicators	high	low
Aggregate social and economic indicators	high	low
Intra-household processes	low	high
Community/institutional profiles and histories	low	high
Local priorities, attitudes, values, perceptions	low	high
Describing change	high if so designed	high
Implications for reliability:		
Sampling error	low	high
(i.e. inverse of statistical representatives)		
measurement error	low if closely supervised	low
Resource requirements		
Time required for collection and analysis	generally long	can be short
Required skill level of interviewers	fairly unskilled	sophisticated
Training needs	medium or high	medium, but specialized
Cost of data collection	medium or high	medium

Combining Methods

Any research project usually requires more than one source or method. Where this is so, research should be phased and organized so that the complementary contributions of data from different sources to understanding the breadth and complexity of social reality are used to their best advantage. It is advisable to collect and review secondary data at the outset of research, and subsequently to combine formal with informal methods so that each enriches the other. Informal data collection is frequently useful in developing hypotheses about the relationship between social and economic variables which can then be tested with more statistical rigor during formal research. Such informal preliminary research also indicates which variables should be measured, and how. This results in questionnaires which are shorter, simpler, and more clearly focused than would be the case without such preliminary research.

During, and subsequent to, formal data collection, informal research has a role to play in providing dynamic, causal, social explanations of relationships which have emerged from formally collected data. It may also be used as a sounding board for testing the plausibility of the researcher's conclusions and explanations with the informants themselves.

Using the *Sourcebook*

The *Urban Poverty Research Sourcebook* was developed to provide researchers, project staff, and development practitioners with tools and techniques useful in the research and analysis of urban poverty issues. It uses the UPA Project - a four-city comparative study undertaken in 1992-94 and task managed by Caroline Moser for the Transportation, Water and Urban Development Department of the World Bank - as the concrete example to illustrate how some of the techniques may be applied.

The *Sourcebook* is not intended to present an exhaustive account of urban social research methods. Several important social research methods of application to the study of urban poverty are not covered here such as household expenditure surveys and tracer studies.

The *Sourcebook* consists of two modules:

Module I, discuss Sub-City Level Household Surveys, and Module II, Indicators of Urban Poverty.

These modules differ according to:

- the **level** to which the data refer (city, neighborhood, community, etc.)
- whether the data generated or used are **primary** or **secondary**
- (for primary data), the data collection method employed (**formal** vs. **informal**)
- (for secondary data), whether the data come from an **institutional** or a **survey** source

Table 2 summarizes relates the characteristics of the two modules according to these criteria.

Table 2

Modules I and II: Differences and Similarities

	MODULE I. a City/Sub-city Household Survey	MODULE I. b City/Community Profile	MODULE II Urban Poverty Indicators
Level of reference	Urban Community	Community/City/Region	City/Region
Primary/Secondary Data	Primary	Mostly Secondary	Mostly Secondary
Methods (Primary data)	Formal questionnaire surveys/structured interviews	Key informant	N/A
Sources (Secondary data)	N/A	City/Municipal Institutions/previous surveys/voluntary sector project reports	Institutions/previous surveys

The methods and instruments presented here should be considered as prototypes, to be selected from, adapted, and modified according to the purposes and circumstances in which they are applied. Each method provides its own perspective on social conditions, and most appropriate selection and combination of research methods will depend upon three main factors: the research objectives; the hypotheses being tested; and the environment in which the research is being done. In particular, **the importance of defining research objectives clearly at the outset cannot be overemphasized.**

These methods should be regarded as complementary rather than alternative tools for social investigation. The *Sourcebook* advocates an eclectic approach, employing a diversity of methods and techniques. Obtaining data from different sources and using different methods enables findings to be verified and their reliability improved. This practice will also frequently be more cost-effective than reliance on a single source, allowing full advantage to be taken of data already available, or, where applicable, of less formal research techniques. Participatory social research techniques are only briefly explored in this *Sourcebook*. There is a scope for a supplementary volume to describe these approaches in detail.

Module I: Sub-City Level Household Survey on Urban Poverty module describes research at the community and household level, essential for an understanding of how poverty and the services and programs designed to alleviate it operate at the community, household, and individual levels. It also discusses the range of secondary data at city or urban-level that are useful to collect in order to provide the contextual background of the study as well as a broad picture of representativeness of the research community.

One or more communities are selected for their relevance to a study of poverty. A random sample survey of households within the chosen community is followed by an intensive interview with a smaller sub-sample, which explores in particular intra-household effects.

A city/community profile is drawn up in order to locate the community within the city and its surrounding urban context. This is prepared from existing secondary data, statistics and surveys of local government and voluntary organizations, and key informant interviews, supplemented by quantitative data emerging from the questionnaire surveys and sub-sample interviews.

This profile covers the history of the community itself, its economy, employment, services, transport links, government, and geographical and economic relationship to the city within which it is located.

As questionnaire-based survey research is extremely demanding of time and resources, the research process and methodology are described in detail. Examples are given throughout of the experience derived from the UPA Project. The research tools and survey questionnaires used in that project are provided in Annexes to this Module.

Module II: Indicators of Urban Poverty module provides a review of selected urban poverty indicators which can be used to evaluate sectoral and project performance. It uses, the concept of a "poverty profile", as applied to a city or an area within the city. The scope of poverty profiles has been considerably enhanced in recent times, moving from the measures of income

and consumption, expressed in a poverty line, to the attempt to locate poverty in the economic, institutional, and social context in which it occurs. A useful checklist of questions addressed by the poverty profile is to be fond in the World Bank's *Poverty Reduction Handbook* (1993), which could be adapted to the area of study (Box 1).

Box 1

POVERTY PROFILE CHECKLIST

1. What is the poverty line (upper and lower)?
2. How many people are poor and extremely poor?
3. How large is the poverty gap?
4. What is the distribution of living standards among the poor?
5. Are there recently been migration of the poor to urban areas?
6. Has there recently been migration of the poor to urban areas?
7. How is poverty correlated with gender, racial and ethnic characteristics?
8. What are the main sources of income of the poor?
9. What products or services do they sell (tradables/nontradables)?
10. How large a factor is unemployment or underemployment?
11. Which are the important goods in the consumption basket of the poor?
12. What is the educational, health and nutritional status of the poor?
13. What are the fertility characteristics of the poor?
14. To what public services do the poor have access? What is the quality of those services?
15. What assets - land, housing and financial - do the poor own?
16. How secure is their access to - and/or tenure over - natural resources?
17. What are the environmental dimensions of poverty?
18. How variable are the poor's incomes? What risks do they face?

Source: World Bank, Poverty Reduction Handbook (1993)

The poverty profile in this *Sourcebook* contains a sub-set of "priority poverty indicators", chosen for their relative ease and frequency of measurement and high accessibility. The techniques described provide a means of rapid assessment of poverty at the city level using available secondary sources and/or primary level data such as that collected for the UPA study.

II.   URBAN POVERTY INDICATORS

The World Bank's commitment to poverty reduction is reflected in the 1993 Wapenhans report on *Portfolio Management: Next steps - A Program of Actions*. The report called for an improvement in the poverty impact of the Bank's lending and investment program with emphasis on issues of "participation, project ownership, NGO involvement and improved performance indicators" in order to provide an "effective diagnosis of the cause of the problem". In response to this mandate, Bank-wide initiatives in developing sector and project-specific indicators are on-going and will continue to evolve as best-practice experience build up and eventually form the basis of an operational system of reliable and robust set of performance indicators.[1]

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[1] These include:
   (1) Education and Social Policy Department (Performance Indicators to Monitor Poverty Reduction: A Note, 1994)
   (2) Performance Indicators for Transportation, Water Supply and Urban Development (forthcoming)
   (3) Participatory Evaluation: Tools for Managing Change in Water and Sanitation, (1993)

At the same time, the United Nations Commission on Human Settlements (Habitat) and the Urban Development Division of the World Bank are working together to identify and formulate a set of policy-related indicators of performance in the areas of urban infrastructure and its effects on poverty, productivity, and quality of life in urban settlements.

Statistics show that the urban environment is rapidly changing in form, size and structure. The staggering population growth in the urban areas has stretched the carrying capacity of most cities, resulting in fewer jobs and increased environmental pressures which limit the access of the poor to affordable housing, safe water, clean air, and basic health and education services. Even the institutional structures have become ill-equipped to respond effectively to mounting urban pressures due to inefficient public policies and weak public policies and weak public institutions.

With population growth rates increasing, income inequalities widening, and the threat of environmental damage expanding, the Urban Development Division of the World Bank formulated the Urban Policy Agenda for the 1990s which focuses on a three-pronged approach to urban development: (1) increasing urban productivity, (2) alleviating urban poverty, and (3) developing effective responses to growing urban environmental crises (World Bank, 1991). The design of performance indicators that serve as reliable and effective diagnostic tools is a critical step in developing new urban initiatives. This module of the *Sourcebook* presents key poverty indicators that measure the distributional aspects of development impact from the point of view of poverty groups, gender, and socially vulnerable groups.

TYPES OF POVERTY INDICATORS

Priority Poverty Indicators

A relatively small number of accessible poverty measured are widely used and can be termed "priority poverty indicators" (World Bank, 1993:21). The key "crude" indicator is the incidence of urban poverty, that is, the number of individuals or households above or below the upper and lower poverty lines. Table 3 lists each of the priority poverty indicators and the policy goal that it seeks to address.

Table 3

PRIORITY POVERTY INDICATORS		
Policy Goal	**Indicators**	**Significance**
Reduce Poverty	*POVERTY* Poverty Line Headcounts - non poor, poor, very poor GDP per capita	The poverty line is one of the most fundamental measures used in monitoring poverty. The upper and lower poverty line figures provide a cut-off between the poor and the very poor.
Increase employment Opportunities	*SHORT TERM INCOME* Unskilled full-time Daily Wage Unskilled part-time Hourly Wage Lower Income Consumer Price Index	These complement the static information of poverty status ad are based on country-specific indicators which provide time-series information useful for tracking the status of the poor. Unskilled wage labor is characteristic of poor households. Similarly the poor are likely to be engaged in casual and informal sector work due to labor demand and supply constraints. Wage data at this level is a useful measure of the poor's level of productivity in response to shifts in labor demand over time.
Improve provision of Basic social services	*SOCIAL* Share in City Government Expenditure of Basic Social Services Share in GDP of Public Expenditure on Basic Social Services Net Primary School Enrollment Under-five Mortality Immunization Coverage Child Malnutrition Female-to-Male Life Expectancy Ratio Total Fertility Rate Maternal Mortality	The extent to which poor households have access to basic social services is an indication of their overall level of living standards. Achievement indicators such as literacy and enrollment rates, child malnutrition and mortality rates capture the non-income related dimensions of poverty which are equally important in determining household welfare. The focus is on women and children as sub-groups that are most likely to be vulnerable.

Key Urban Poverty Indicators

A number of indicators quantify the consequences of poverty - as defined by low-income or lack of adequate services. These indicators facilitate analysis, monitoring, and comparisons of urban poverty and can be called "key urban poverty indicators".

Table 4 provides examples of key urban poverty indicators. These can be used as sound measures of the development impact of urban programs and projects on poor households. They can help to identify serious gaps that represent potential entry points for policy and program interventions which are economically viable and socially desirable.

Table 4

Key Urban Poverty Indicators		
a. *Poverty, Productivity and Employment*		

Policy Goal	Indicator	Significance
Reduce urban poverty	Incidence of urban poverty -the percentage of individuals below the poverty line	The most fundamental poverty indicators. Requires survey data. Useful for cross-country, cross-city comparisons only if absolute poverty line is established.
	Severity of urban poverty -the percentage of individuals below 50 percent of poverty line	Indicates the incidence of severe poverty. When high relative to overall poverty incidence, suggests the need for carefully targeted interventions.
	Depth of urban poverty (poverty gap) -the mean income/expenditure of poor as percentage of poverty line	Depends on the distribution of income among the poor. Can be used to determine the average resource gap required to bring the poor up to the level of living standards associated with the poverty line.
	Household size -the number of persons per household who live, eat and sleep in the same dwelling unit	A household is the basic unit of living and consumption in a society. When used in combination with indicators of housing units, types and infrastructure of the households, the indicators shows the pattern and quality of the population. The growth of household size shows the changes of household formation over time.
	Household composition -the structure of household (i.e. nuclear, extended, multi-adult)	
	Dependency burden -the ratio of working members to non-working members (dependants)	Reflects the extent of financial burden on working members of the household to provide food and other basic essentials for daily living.
Increase employment	Labor force participation rate -rate percentage of adults who participate in the labor force	A standard measure of labor market performance, more easily calculated and more reliable than the unemployment rate in many low-income developing countries. At higher levels of development, the latter is also a key indicator.
Establish and maintain good working conditions	Wage level -the average hourly wage rate for all employed persons	Reflects the productivity of the work force and its composition in terms of education, skill and experience as well as the level of other factor inputs. A key component of labor earnings - the product of wages and hours worked-another indicator of interest.
	Formal sector employment -the percentage of the labor force employed in formal sector jobs	A key measure of the stage of development of urban labor markets, associated with average wage levels, and possibly indicative of barriers to upward mobility.
	Child labor -the percentage of children who are employed full or part-time	A measure of the structure of the work force and an indirect measure of the (in) adequacy of educational opportunities and of the (in) effectiveness of child labor legislation.

Table 4 (continued)

	Key Urban Poverty Indicators	
a. Poverty, Productivity and Employment		
Policy Goal	**Indicator**	**Significance**
Provide secure tenure for enterprises	Enterprise tenure security -the percentage of all enterprises which have a legal right to operate and either full rights of ownership or use	Comprehensive, transparent, and effective systems of property rights, together with an appropriate regulatory framework can stimulate business expansion. The converse is also true. This is an indicator of the degree to which incentives to start and expand enterprises may be suppressed because of inappropriate policies.
Ensure adequate financing for enterprises	Enterprise financial access -the percentage of all enterprises with loans from formal financial institutions and/or publicly held equity financing	This is an indicator of the degree to which the formal financial sector is providing a supportive context for business expansion.
Ensure efficient regulation of enterprises	Regulatory delay -the average time required to secure all approvals necessary to operate a commercial enterprise	Regulatory impediments to establishing and operating businesses not only raise costs and lessen productivity, but also may result in decreased competition and greater industrial concentration in regulated industries, in turn increasing product costs and heightening cyclical sensitivity to demand shocks.
b. Access to Housing[2]		
Housing affordability	House price to income ratio -the ratio of the median free-market price of a dwelling unit and the median annual household income	Possibly the most important summary measure of housing market performance, indicating not only the degree to which housing is affordable by the population, but also the presence of market distortions. When abnormally high, it often indicates severe supply-side restrictions; when low, lack of effective demand attributable to limited or insecure property rights.
	Rent to income ratio -the ratio of the median annual rent of a dwelling unit and the median household income of renters	A key measure of affordability, which may also indicate, when high, the presence of supply-side distortions; when low, the presence of rent control, which may depress rates of production, maintenance, and investment.

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[2] These are some of the indicators developed and tested by the Housing Indicators Program, for which data are available in 53 cities in as many countries.

Table 4 (continued)

Key Urban Poverty Indicators		
b. Access to Housing		
Policy Goal	**Indicator**	**Significance**
Adequate housing for all	Housing production -the net number of units produced (units produced minus units demolished) in both the formal and informal sectors per 1,000 population	A traditional measure of ability of the housing supply system to increase and replenish the housing stock, but one which fails to take account of either average household size or the rate of household formation. Alternative measures can compare relative rates of household formation and housing stock increase (possibly also accounting for demolitions and modifications to the existing stock).
Adequate housing quality and space	Floor area per person -the median usable floor area per person	This indicator measures the adequacy of living space in dwellings. A low value for the indicator is a sign of overcrowding. Alternative measures are person per room and households per dwelling unit.
	Permanent dwelling units -the percentage of dwelling units likely to last twenty years or more given normal maintenance and repair, taking into account locational and environmental hazards (e.g. floods, typhoons, mudslides, earthquakes)	This indicator is one measure of the quality of housing, particularly of its durability. Permanent structures usually provide better protection from the elements and a higher standard of structural safety, and require a higher level of initial investment.
Secure housing tenure	Unauthorized housing -the percentage of the total housing stock in the urban area which is not in compliance with current regulations	This indicator measures the extent to which the urban population is housed legally. It includes both squatter houses occupying land illegally, and houses constructed without the required building, land use, or land subdivision permits. High values depress incentives to invest in housing and indicate difficulty in establishing collateral value of mortgage loans
c. Access to Transport, Production and Market Infrastructure		
Access to public tenure	Access to public transport by urban poor -the percentage of employed members of poor households who rely on public transport for work trips	Can indicate the degree to which the poor are underserved by public transport, with implications for labor force participation and transport cost and time.
Improve quality of urban transport	Average journey time to work	Indicates general quality of work journey, combining effects of spatial dispersion, congestion, network density, etc.

Table 4 (continued)

Key Urban Poverty Indicators
d. Access to Services and Social Infrastructure
i. Water and Sanitation
Policy Goal	**Indicator**	**Significance**
Improve service coverage	Access to water by urban poor -the percentage of poor households with various means of obtaining water supply	Access to piped water is associated with both better health and time savings associated with less collection time. Has important implications for women and children. Associated with de facto tenure security in many cases.
	Access to sewerage -the percentage of poor households served by different types of provision for sewage disposal	Preliminary assessment of how population is served. Indicator to be used with caution due to quality of data limitations
	Average time spent in fetching water	Reflects the time constraint imposed on individuals in the household because of inadequate public provision of basic services which has serious implications on the use of productive labor
	Water quantity -production/consumption liters/per capita/per day	Water: provides information on adequacy of water production and ability of utility to provide water on demand
Improve service quality	Water quality -Percent of water supplied that meets country's drinking water standards	Combined with previous indicators provides a picture of service quality
	Water supply reliability -percentage of population receiving water supply on demand, 24 hours per day	
	Sewage treatment rate -percentage/degree of waste that is treated	Preliminary assessment of water quality of receiving bodies
	Sewerage reliability -percentage of population subjected to periodic flooding/backups	Combined with service coverage indicator provides information on quality of sewerage services
ii. Solid Waste Disposal
Solid waste collection	Access to solid waste collection -defined as the percentage of households with regular (e.g. weekly or more often) waste collection	Adequate waste removal is associated with a number of public health benefits, both direct and indirect (e.g. lower likelihood of blockage of drainage systems)
iii. Electricity Supply
Electricity	Access to electricity supply -defined as the percentage of poor households with a dwelling connection to electricity	Access to electricity is important for the poor both because of its direct benefits but because gaining access is a first step toward tenure security

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Table 4 (continued

Key Urban Poverty Indicators		
d. Access to Services and Social Infrastructure		
iv. Health and Education Services		
Improve access to basic social infrastructure	Access to education -the percentage of children of poor households attending school	Associated with upward mobility and future income-earning possibilities among the poor. Can indicate service deficiencies in provision of education
	Access to health services -the percentage of poor households in which any member visited a doctor or nurse in the previous year	Can indicate the degree to which the poor are underserved by health services, with implications for health of the poor and subsequent implications for labor force participation and employment
Improve actual health and educational levels	Infant mortality Under five mortality Immunization coverage Child malnutrition Female/male life expectancy ratio Total fertility rate Maternal mortality rate	Reflect the standards of health care delivery and more indirectly factors in nutrition, occupation and the environment
	Net enrollment rates in 1ary/2ary schools Illiteracy rate -the percentage of the population (age 15+) with no schooling i.e. cannot read and write Pupil-teacher ratio: 1ary Pupil-teacher ratio:2ndary Drop-out rates	Provide a picture of educational provision and take-up. Low school attendance and high drop-out rates are usually found in poor neighborhoods and are usually due to a wide range factors: need for school-age children to help in home-based enterprise; teenage pregnancy; lack of schools and/or discriminatory administrations and policies; prohibitive costs of education, fees, uniforms, books and transports; overcrowding classrooms, poor lighting and ventilation
e. Affordability of Urban and Social Services		
Improve affordability of urban and social services	Percent of income spent on: Water Electricity Solid waste collection Health Education Transport	Indicate the financial burden of urban and social infrastructure services on residents; can focus particularly on the poor by taking measurement for a given income decile, or for households at the defined poverty level.

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Table 4 (continued)

	Key Urban Poverty Indicators	

f. Level of Infrastructure Provision

Policy Goals	Indicators	Significance
Adequate infrastructure provision	Infrastructure expenditure ratio -the ratio of total expenditures (operations, maintenance, and capital) by all levels of government (including private utilities and parastatals) on infrastructure services (roads, sewerage, drainage, water supply, electricity, and garbage collection)	This indicator is an indirect measure of the supply of infrastructure for residential development. Low levels of infrastructure expenditures, by contrast, result in land supply bottlenecks and thus in higher prices for land and housing. They also result in inadequate provision of residential amenities, such as water, sewerage, drainage and electricity, and in subsequent traffic congestion, all of which have a direct effect on the quality of housing

g. Gender-Specific Indicators

Policy Goals	Indicators	Significance
Reduce urban poverty	Urban female-headed households in poverty -the percentage of female headed households below poverty line	Indicative of the extent of poverty among a group with often qualitatively different requirements in terms of poverty interventions
Facilitate equitable distribution of employment opportunities and remuneration	Gender wage equity -the ratio of female-to-male wage rates for all employed workers	A measure of structural problems in the labor market which may reflect inadequacies in educational or training opportunities for girls and women, discriminatory behavior by employers, or lack of effective legislation and enforcement. Influences income and labor force participation directly
	Gender education differences	
	Gender labor force participation equity -the ratio of female-to-male labor force participation rates	A direct determinant of earnings of women, possibly reflecting the same structural inadequacies described for the previous indicator
Promote full participation of women	Woman owner-occupied housing -percentage of dwelling units owner-occupied by women	Measures the equal access of women to land tenure rights
	Asset ownership by women -percentage of households owning land or property by gender	Reflects the existence of barriers to women in acquisition of assets and property, productive and non-durable goods

III. METHODOLOGICAL ISSUES

A number of issues should be considered when collecting urban poverty data.

City Defining Jurisdictions

Provide city-level data as far as possible. This may often be difficult or impossible, since most cities, together with their suburbs, cover more than one administrative unit. The various *jurisdictions* - spatial units to which data may apply - are listed below, in order of size. The City Proper is smaller than the "real" city, which is the Urban Agglomeration. Larger units - the Metropolitan Area and City Province - are likely to contain rural and possibly other urban areas which are not strictly part of the city being studied. The largest aggregation is that of all cities or urban areas at national level. Some data may only be available at this level.

Jurisdiction	Definition
City Proper	The principal political jurisdiction containing the city center
Urban Agglomeration	Total contiguous built-up area which may spill over defined political boundaries
Metropolitan Area	A politically defined urban area set up for planning or administrative purposes which may combine several jurisdictions (municipalities or cities)
City Province	The national political jurisdiction (usually a region or province) which contains the city as well as a rural hinterland and possibly other towns or cities
National Urban	The national aggregation of urban areas

It is essential when collecting, analyzing and comparing data, to identify and define clearly the jurisdiction to which it applies, and follow the definition consistently. This may mean adjusting or recombining some statistics.

Given the heterogeneity of urban areas, spatially dis-aggregated data (e.g. by district, ward or community, where available) will normally be necessary for understanding the patterns of social and economic deprivation and the distribution of social goods. Often maps (see below) are the best way of depicting patterns of distribution.

Data Sources

Possible sources of data on city-level social indicators include: earlier surveys; reports and censuses from national, regional, and city government and government agencies; and planning,

academic, and consultancy reports from national or international agencies, universities, and institutions. A host of local bodies may collect and publish data in annual and other reports: health authorities, education authorities, public transport companies, the police and courts, chambers of commerce, employers groups, trade unions, churches, NGOs. Where no city-level data are available, it may be necessary to rely upon national figures, which are sometimes broken down by "urban" vs. "rural", and will therefore yield data out the 'National Urban' level on (*see Jurisdictions, above*).

Identifying Sources

If the information is gathered through a personal interview, give the name of the person interviewed, her/his position, and organization/agency. Additional information on the data or sources should be provided. Include bibliographic notes and/or attach a copy of the document or relevant information to the Questionnaire.

Always identify your sources and indicate these in the Source Box as follows:

Jurisdiction to which the data applies:	Jurisdiction
Base year, month:	Year, Month:
Source(s):	Source 1:
Notes:	Source 2:
	Notes:

Units of Measurement

The information given should be based on standard units of measurement for each item. If it is available in another unit, either convert it to the required unit, or if this is not feasible, give the unit of measurement used. Prices may be quoted in local currency or US$, equivalent, depending on the intended use of the data. It is decided to use US$, for current prices use the current exchange rate for past prices use the exchange rate prevailing at the time for which the data are valid. Exchange rates and inflation rates for the past 12 months and previous years are available from the World Bank.

Maps

If possible, supplement the statistical information in the Profile by providing a base map of the city, showing the political and geographic boundaries of the various jurisdictions (City Proper, Urban Agglomeration, Metropolitan Area and City Province). Provide overlay maps to locate specific items, especially intra-city political boundaries (municipalities, boroughs); the community or communities studied; transport facilities, interchanges, termini and routes; health facilities; schools; main centres of employment (retail/service; industrial estates); areas with or without access to basic services (electricity, gas, water, main drainage); parks and recreation facilities.

Reliability

In addition to their number and distribution or location, the quality and reliability of infrastructure, services, and facilities are essential aspects of their utility, and information about these should be included where available.

Missing Data

If the information cannot be obtained, indicate as follows:

Not Applicable	N/AV
Not Applicable	N/AP

IV. GENERAL BACKGROUND INFORMATION FOR COLLECTION OF URBAN POVERTY INDICATORS

The following general background information should be prefixed to any collection of data for urban poverty indicators:

City Identification

Name of City		
Metropolitan Area		
Province/Region		
Country		
Currency		Date
Exchange Rate	= US$1.00	
Inflation last 12 months	%	

Researcher Identification

Contact Person	
Position/Title	
Organization	
Address	
Telephone	
Fax	
Date Questionnaire Completed	

Units of Measure

Measure	Local Unit	Conversion	Metric Unit
Distance		=	Kilometres
Weight		=	Kilograms
Capacity		=	Litres
Land Area		=	Hectares
Other:		=	

Currency

UNIT OF CURRENCY:		
	Value	Dave valid
Exchange Rate (=US$1.00)		
Rate of inflation over past 12 months (%)		

SPATIAL AND JURISDICTIONAL DEFINITIONS

Definition: Provide the strict definition to which you will adhere for this research, together with any notes and comments about the history and development of the City. Obviously, one or more of the jurisdictions listed may not be relevant to a particular city, (e.g. the Urban Agglomeration and Metropolitan Area may be identical) or the Metropolitan Area may on its own constitute the City Province.

Map: Provide a map showing the physical location and boundaries of the various jurisdictions (City Proper, Urban Agglomeration, Metropolitan Area, and City Province).

Jurisdiction		Land Area
City Proper	Strict definition:	
	Notes:	
Urban Agglomeration	Strict definition:	
	Notes:	
Metropolitan Area	Strict definition:	
	Notes:	
City Province	Strict definition:	
	Notes:	

V. TOOLS FOR COLLECTING PRIORITY POVERTY INDICATORS

Table 5 summarizes the Priority Poverty Indicators that can be collected. Details and help notes follow[3].

Table 5

	PRIORITY POVERTY INDICATORS SUMMARY TABLE					
	Indicator	Unit	Non-poor	Poor	Very Poor	Overall
A1-3	Poverty Headcount	%				
	Poverty Line Income Level		>	>	<	n/a
A4	GDP per capita		n/a	n/a	n/a	
B1	Unskilled Full-time Daily Wage		n/a	n/a	n/a	
B1a	Construction Laborer Daily Wage		n/a	n/a	n/a	
B2	Female Full-time Daily Wage		n/a	n/a	n/a	
B3	National Minimum Daily Wage		n/a	n/a	n/a	
B4	Unskilled Part-time Hourly Wage		n/a	n/a	n/a	
B5	Lower Income Consumer Price Index		n/a	n/a	n/a	
C1	Share in City Government Expenditure of Basic Social Services	%	n/a	n/a	n/a	
C2	Share in GDP of Public Expenditure on Basic Social Services		n/a	n/a	n/a	
C3	Net Primary School Enrollment Boys	%				
	Girls	%				
C4	Under-Five Mortality Boys	per 1,000				
	Girls	per 1,000				
C5	Immunization Coverage Boys	%				
	Girls	%				
C6	Child Malnutrition Boys	%				
	Girls	%				
C7	Female-to-Male Life Expectancy	Ratio				
C8	Total Fertility Rate	Children				
C9	Maternal Mortality	per 1,000				

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[3] Format adapted from World Bank Urban Management Programme's *Rapid Urban Environmental Assessment* and *Urban Environmental Indicators Questionnaire* (Leitmann).

HELP NOTES

POVERTY LINE

A poverty profile *attempts to portray the extent and nature of poverty and the distinguishing characteristics of the poor. It normally includes measures of the extent of poverty, based upon a count of the numbers of those whose income or consumption falls below a defined* poverty line, together *with* poverty indicators *that summarize the income, living standards, and social conditions of the poor (World Bank, 1993:13).* Poverty indicators *are selected on the basis of their ability to facilitate analysis, monitoring and comparisons of poverty.*

A poverty line *is normally defined by national government and is based on income or consumption data. It may be* relative - *comparing the position of an individual or household with the average income in the country, and set at, e.g. one-half of the mean income, or at the 40th percentile of the distribution; or it may be* absolute - *a measure whose real value is fixed over time, such as a minimum consumption basket based on the amount of food necessary for a recommended minimum calorie intake.*

Two lines are normally defined: an upper poverty line*, and a* lower poverty line*. If there is no nationally accepted poverty line, methods are available for establishing one (Ravallion, 1992).*

Poverty Line data are relatively well established in many countries, and are often used as a reference point in other surveys and research. This makes it quite likely that data will exist at the sub-city level (perhaps collected as part of a national or local government survey, for specific research into nutrition, health or education as part of a NGO project, etc.). Efforts should be made to locate any such data and append them to the present study. Even if sub-city level data are only available for one or more specific areas or neighborhoods, they will add to and shed light on city-wide data.

A1-3 Poverty line headcounts

Give the numbers above the Upper Poverty Line (the Non-Poor), between the Poverty Lines (the Poor) and below the Lower Poverty Line (the Very Poor) for the relevant spatial unit(s). Indicate by checking a box below the table, whether the count is of individuals or households. Specify in local currency or dollar equivalent the actual income level defined in the two poverty line definition and the survey data upon which the poverty line counts are based.

A4 GDP per capita

The single indicator most commonly used to compare the wealth or poverty of nations is GDP per capita. Although it is a very crude measure, because it is so widely available it provides a convenient base-line against which to interpret poverty-line data.

	A1 Non-Poor (above Upper Poverty Line)	A2 Poor (between the two Poverty Lines)	A3 Very Poor (below Lower Poverty Line)	Total Population
Numbers*				
Percent				100.0

*Count is of: Individuals ☐   Households ☐   (*x* as appropriate)

POVERTY LINES	INCOME/CONSUMPTION LEVEL
Upper	
Lower	

Jurisdiction:

Year, Month:

Source 1:

Source 2:

Notes:

Notes on Poverty Line definition and measurement

A4 GDP PER CAPITA

HELP NOTES

SHORT-TERM INDICATORS

The short-term Income indicators *track the income-earning* opportunities *of the poor (as opposed to the actual incomes earned). However, they may be taken as a "barometer" of incomes. These indicators may be available with greater frequency and may therefore detect shorter-term trends and effects (World Bank, 1993:21). If a general figure for unskilled labor is not available, a figure should be taken from a representative unskilled occupation - construction laborer is perhaps the most obvious; has the advantage that this occupation is available at generally similar levels and status in almost all cities, and is generally unprotected by legislation or trade union agreement, which means that it will swiftly reflect changes in the market.*

It is extremely important to collect data on women's wage levels. In many urban poor households women are the principal or sole wage earners; and there has been a widespread trend in urban areas towards increased employment of women and part-time workers at the expense of full-time male employment.

B1-B Unskilled full-time wage level

Full-time wage level is expressed as a daily amount, since many unskilled occupations (e.g. construction laborer) are in reality day labor, contracted and paid for one day at a time. Efforts to extrapolate to a weekly, monthly, or yearly wage are often subject to great inaccuracy: the length of the working week (and hence the weekly take-home wage) may vary greatly according to economic, cyclical, or seasonal factors; many unskilled workers spend periods of days or months each year without work. The purpose of this indicator is to measure the level *of wages payable rather than the actual income earned. The latter, though extremely important, requires a much more painstaking and detailed analysis, and is therefore unsuitable for inclusion as a short-term indicator. By way of reference-point, the national legal minimum wage (if any) should be included, (expressed as a daily rate).*

B4 Unskilled part-time hour/wage level

Part-time work is widely agreed to form a major component of the income of the poor, and often the sole income of the poorest households. Hence the importance of attempting to capture the level of part-time wages. If general data are unavailable, it may be possible to take a representative occupation (e.g. dish-washer in a restaurant; office cleaner; childcare work, etc.)

It would be very useful to capture data about earnings in the informal sector, because of the significant contribution these make to the incomes of the urban poor: such things as street-selling, household enterprises, etc. if any such data are available, they should be collected and included. All such data should, however, be treated with great caution because of the notorious difficulty of costing inputs.

B5 Lower income consumer price index

Nominal income indicators should be deflated by a price index that reflects the consumption patterns of the poor (usually a subset of the Consumer Price Index basket, more heavily weighted toward food and fuel). If no such index is available, the regional or national food price index is a second-best and the CPI a third-best (World Bank, 1993:24).

B1-3   UNSKILLED FULL-TIME DAILY WAGE LEVEL

B1. General	B1a. Construction Laborer	B2. Female	B3. National Minimum Wage

Jurisdiction
Year, Month:
Source 1:
Source 2:
Notes:

B4 UNSKILLED PART-TIME HOURLY WAGE LEVEL

Male	Female

Notes on unskilled wage levels. Occupation(s) on which male and female part-time and full-time wages based:

Source Text
Year, Month:
Source 1:
Source 2:
Notes:

B5 LOWER INCOME CONSUMER PRICE INDEX

Lower Income CPI

Notes on CPI measure used and relevance for poor households:

HELP NOTES

SOCIAL INDICATORS

Poverty indicators at national level commonly include "GDP share of Social Sector Public Expenditures" (World Bank, 1993:24). Such data are not generally available at city level, since it is extremely difficult to measure domestic product at less than national level. An analogous city-level indicator is the proportion of the city's budget allocated to spending on basic social services (health, public health, childcare, education, cheap housing, water supplies, etc.) Cross-country comparisons with this indicator are unlikely to be useful, because of different histories of service provision and local government structure. However, within-country comparison may be significant.

If data on city revenues and expenditure are available, it may be possible to derive this indicator. Many social services at city level are likely to be provided and/or funded, wholly or in part, by national, private, or independent agencies or NGOs, so that expenditure on such services by the City government will be only part of the whole. Nevertheless, the extent of that spending, and the proportion of total City spending it constitutes will give a crude indication of the "poverty orientation" of the City government, and the way this changes over time. Any such changes detected may also reflect one of the more salient effects of economic reform policies, which have resulted in drastic reductions in services provided by national and local government. The key question for poverty research is whether these services have been eliminated, reduced, or assumed by other providers (private or NGO). If they have been eliminated, what are the consequences, and are they still needed?

Researchers will need to examine which social services are, or have been until recently, provided by the City; identify a sub-set of these services deemed basic; total the expenditure figures for these, and then relate them to the overall budget (or revenue) of the City.

C1 Share in city government expenditure of basic social services

Identify a set of basic social services provided or funded by the City government. Calculate the expenditure on these services against total City spending.

C2 Share in (national) GDP of pubic expenditure on basic social services

C1 SHARE CITY GOVERNMENT EXPENDITURE OF BASIC SOCIAL SERVICES

Basic Social Service	Expenditure	% of total city budget
TOTAL		

Expenditure figures are: Actual ☐   Budget ☐   (*x* as appropriate)

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Basic Social Services/City expenditures/History of changes:

C2 SHARE IN GDP OF PUBLIC EXPENDITURE ON BASIC SOCIAL SERVICES

HELP NOTES

SOCIAL INDICATORS (cont.)

Where possible, the remaining social indicators should be cross-tabulated by poverty level. While it is unlikely that data (e.g. on primary school enrollment rates) will have been collected together with poverty/income data, thee may be surveys at the borough or intra-urban district level which provide an approximation to this cross tabulation.

Primary school enrollment rates are fairly widely available, are likely to be more reliable than literacy or completion rates, and reflect changes without time-lags. They should show the proportion of the relevant age cohort attending primary school, corrected for repeaters and over-age students. However, problems of attending primary school, corrected by repeaters and over-age students. However, problems of attendance, distribution, and quality of schooling are not picked up by this indicator, which should be supplemented, where possible, by information on student-teacher ratios, drop-out rates, number of students per school, and public expenditure levels and trends (World Bank, 1993:24). Gender and regional differences should be explicitly noted.

Children's health and nutritional status is a key poverty indicator. UNICEF and others view under five mortality rate as the best and most complete indicator of changes in children's health status. It is more sensitive to short-term economic variations than is life expectancy, and is not subject to cultural biases, such as the age of weaning, which affect the infant mortality rate. However, data supplied are often extrapolated rather than based on actual observation.

C3 Net primary school enrollment

Show the percentage of the relevant age cohort (determined by the local legal or normal age for starting school, extended for the normal number of years in primary school - usually 6 - and corrected for repeaters and over-age students) actually enrolled in primary school.

C4 Gender-five mortality rate

Show the rate (usually quoted as deaths per 1,000). Exclude figures based on extrapolation or interpolation.

C3 NET PRIMARY SCHOOL ENROLLMENT

Net Primary School Enrollment %				
	Non-poor	Poor	Very Poor	Overall
Boys				
Girls				
Overall				

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on New Primary School Enrollment data:

C4 UNDER-FIVE MORTALITY RATE

	Non-Poor	Poor	Very Poor	Overall
Boys				
Girls				
Overall				

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Under-Five Mortality Rate data:

SOCIAL INDICATORS (cont.)

Trends in immunization coverage may indicate short-term changes in access to health services. However, since immunization is often the responsibility of a single department or agency, very specific or localized budget or administrative changes can have major effects on this indicator, and do not necessarily *reflect the situation of health provision as a whole. Conversely, according to WHO, the management skills necessary for effective immunization services also help in managing other aspects of more comprehensive health programs, which suggests that other aspects of a primary health care system can be monitored through the data on immunization coverage. Data are widely available through UNICEF, WHO, and national governments. (World Bank, 1993:25)*

The poor benefit disproportionately from effective immunization coverage, because poor nutrition, housing, and environmental factors make their children more susceptible to infection if not immunized, while their lack of access (and the means to purchase access) to adequate medical care renders infected children more prone to serious or fatal outcomes.

Malnutrition, especially among the most vulnerable family members, is generally a bottom-line indicator of family welfare. It is defined as the percentage of children usually one through four years old, of less than two standard deviations of the reference median WHO standards. Nutrition data are sensitive to short-term economic and policy changes. (World Bank, 1993:26)

C5 Immunization coverage

Collect data on the percentage of children immunized by 12 months of age. Use WHO Expanded Immunization Program definitions and criteria. In many cities data may be available at the sub-city level, at least for some neighborhoods, especially where specific immunization campaigns are or have been undertaken. Collect and include such data wherever possible.

C6 Child malnutrition

Collect data on the percentage of children one to four who are malnourished according to WHO criteria.

C5 IMMUNIZATION COVERAGE

Children immunized by 12 months of age %				
	Non-Poor	Poor	Very Poor	Overall
Boys				
Girls				
Overall				

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Immunization Coverage data:

C6 CHILD MALNUTRITION

Children 1-4 malnourished %				
	Non-Poor	Poor	Very Poor	Overall
Boys				
Girls				
Overall				

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Malnutrition data:

SOCIAL INDICATORS (cont.)

In urban poor households, women are often the sole or principal breadwinner, and typically undertake almost all the care for children, the sick, and elderly. Their health (in which their fertility plays a significant part) is crucial for the health of the households which depend upon them. Data on any or all of these indicators may be available at the sub-city level, usually as part of specific health surveys or programs, undertaken by government or NGO agencies. Collect and report any sub-city level data available. Such studies of individual areas or communities may yield income/poverty data for cross-tabulation.

C7-9 Women's health indicators

The Female/Male Life Expectancy at Birth *ratio is a good summary measure of women's status in society. Normally women outlive men. In high-income countries, women live an average of six years longer than men. In low-income countries, they live only two years longer. The indicator needs to be viewed against appropriate norms.*

Total Fertility Rate *is defined as the number of children a woman would bear if she were to live to the end of her childbearing years and bear children at each age in accordance with prevailing age-specific fertility rates.*

Maternal Mortality *(usually in deaths per 1,000 in the prenatal period). Among poor women, the most frequent cause of death is unattended childbirth. The maternal mortality rate is an indicator of poor women's access to basic health services.*

C7-9   WOMEN'S HELATH INDICATORS

	Non-Poor	Poor	Very-Poor	Overall
C7 Female/Male Life Expectancy Ratio				
C8 Total Fertility Rate				
C9 Maternal Mortality				

Jurisdiction
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Women's Health Indicators:

VI. TOOLS FOR COLLECTING KEY URBAN POVERTY INDICATORS

Table 6 summarizes the different Key Urban Poverty Indicators that can be collected. Details and help notes follow>

Table 6

KEY URBAN POVERTY INDICATORS SUMMARY TABLE						
#	Indicator	Unit	Breakdown			
A1	Incidence of Urban Poverty	%				
A2	Severity of Urban Poverty	%				
A3	Depth of Urban Poverty (Gap)					
			Non-Poor	Poor	Very Poor	Overall
A4	Household Size	Individs				
	Median	Individs				
A5	Household Composition	%				
	Female-Headed	%				
	Extended	%				
	Other	%				
A6	Dependency Burden	Ratio				
	Median	Ratio				
A7	Labor Force Participation Rate	%				

#	Indicator	Unit		#	Indicator	Unit	
A8	Wage Rate			B3	Housing Production	Units	
A9	Formal Sector Employment	%		B4	Floor Area per Person	m²	
A10	Child Labor	%		B4	Floor Area per Person	m²	
A11	Enterprise Tenure Security	%		B5	Permanent Dwelling Units	%	
A12	Enterprise Financial Access	%		B6	Unauthorized Housing	%	
A13	Regulatory Delay	Months		C1	Access to Public Transport	%	
B1	House Price to Income	Ratio		C2	Average Journey Time to Work	%	
B2	Rent to Income	Ratio	*(Table continued on next page)*				

Table 6 (cont.)

KEY URBAN POVERTY INDICATORS SUMMARY TABLE

#	Indicator	Unit		#	Indicator	Unit	
D1	Access to Water	%		D19	Access to Education Girls	%	
	Stand-pipe	%			Boys	%	
	Tanker	%		D20	Gross Enrollment Primary Girls	%	
	Well-bore	%			Boys	%	
	Natural	%		D21	Gross Enrollment Secondary Girls	%	
D2	Access to Sewerage	%			Boys	%	
	Wet septic tank	%		D22	Illiteracy Rate Girls	%	
	Day latrine	%			Boys	%	
	None	%		D23	Pupil-Teacher Ratio Primary	Ratio	
D3	Average Time Fetching Water	mins		D24	Pupil-Teacher Ratio Secondary	Ratio	
D4	Water Quantity	Li/p.c./day		D25	Drop-out Rate Primary Girls	%	
D5	Water Quality	%			Boys	%	
D6	Water Supply Reliability	%		D26	Drop-out Rate Primary Girls	%	
D7	Sewage treatment Rate	%			Boys	%	
D8	Sewerage Reliability	%		E1	Income Spent on:	%	
D9	Access to Waste Collection	%			Electricity	%	
D10	Access to Electricity Supply	%			Solid waste collection	%	
D11	Access to Health Services	%			Health	%	
D12	Infant Mortality	per 1000			Education	%	
D13	Under-5 Mortality	per 1000			Transport	%	
D14	Immunization Coverage	%		F1	Infrastructure Expenditure	Ratio	
D15	Child Malnutrition	%		G1	Female-Headed Households in Poverty	%	
D16	Female-Male Life Expectancy	Ratio		G2	Gender Wage Equity	Ratio	
D17	Total Fertility Rate	Children		G3	Gender Labor Force Participation	Ratio	
D18	Maternal Mortality Rate	per 1000		G4	Woman Owner-Occupied Housing	%	
				G5	Asset Ownership by Women	%	

HELP NOTES

POVERTY, PRODUCTIVITY, AND EMPLOYMENT INDICATORS

Enter the numbers above the Upper Poverty Line (the Non-Poor), between the Poverty Lines (the Poor), and below the Lower Poverty Line (the Very Poor) for the relevant spatial unit(s). Indicate by checking a box below the table, whether the count is of individuals or households. Specify in local currency or US$ equivalent the actual income level defined in the two poverty lines. Annotate as fully as possible the derivation, strengths and weaknesses of the poverty line definition and the survey data upon which the poverty line counts are based.

A1 Incidence of urban poverty

-the percentage of individuals below the (Upper) Poverty Line.

This is the most fundamental poverty indicator, but it is useful for cross-country and cross-city comparisons only if an absolute poverty line is established.

A2 Severity of urban poverty

-the percentage of individuals (or households) below 50% of the (Upper) Poverty Line.

This gives a count of the number of the Severely Poor. Depending on the way the Lower and Upper Poverty Lines are defined, this indicator may the identical to or different from the number of the Very Poor.

A3 Depth of urban poverty (poverty gap)

-the mean income/expenditure of the poor as a percentage of the (Upper) Poverty Line.

This depends on the distribution of income among the poor. It can be used to determine the average resource gap required to bring the poor up to the level of living standards associated with the poverty line.

A1 INCIDENCE OF URBAN POVERTY
A2 SEVERITY OF URBAN POVERTY

	Non-Poor (above Upper Poverty Line)	Poor (between the two Poverty Lines)	Very Poor (below Lower Poverty Line)	Total Population
Numbers*				
Percent				100.0
A1 % of individuals below the (Upper) Poverty Line				
A2 % of individuals below 50% of (Upper) Poverty Line				

*Count is of: Individuals ☐   Households ☐   (*x* as appropriate)

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

A3 DEPTH OF URBAN POVERTY (POVERTY GAP)

POVERTY LINES	INCOME/CONSUMPTION LEVEL
Upper	
Lower	
50% of Upper Poverty Line	
Mean Income/Expenditure of Poor	
A3 Mean Income/Expenditure of Poor as Percentage of (Upper) Poverty Line	

Notes on Poverty Line definition and measurement

The household is the basic unit of living and consumption in a society. When used in combination with indicators of housing units, density, types and infrastructure, household indicators serve to show the pattern and "quality" of the population.

Household size is intimately related to poverty. In general, large household sizes correlate with higher poverty levels. It may be possible to obtain sub-city level data for household size from the census, local surveys, electoral registers, housing, or even tax data. If such data is available, it would be useful to represent it on a map. It may also be used (by classifying certain areas as non-poor, poor, or very poor) to approximate the cross-classification by poverty.

A4 Household Size

-the mean number of persons per household who live, eat and sleep in the same dwelling unit.

The precise definition of household may vary depending on the source of the data. In the UPA study a slightly different definition was used:

-a group of people who usually live and eat together in the same dwelling and who generally consider themselves to be the unit for which plans and decisions about daily life will be made.

A5 Household Composition

-the structure of the household.

Levels of single-person (especially single-female) headed households and extended family households are generally expected to be higher in low-income areas. Thee level of single-female-headed households suggests high levels of vulnerability and has immediate and obvious implications for the targeting of poverty programs and social services.

The degree of precision available in classifying households along two axes:

1. The primary relationship - single person, couple, multi-couple, multi-adult (two or more adults not in a sexual relationship), polygamous.
2. Secondary membership - only (i.e. no others present), nuclear (presence of one or more children of a party to the primary relationship), or extended (presence of one or more other relatives of a party to the primary relationship).

It is unlikely that such precision will be possible with secondary data. Of particular interest in poverty studies is the number of female-headed households.

A4 HOUSEHOLD SIZE

Household Size (No. of individuals	Non-Poor	Poor	Very Poor	Overall
Mean				
Median				

Notes on Household Size data	

Jurisdiction
Year, Month:
Source 1:
Source 2:
Notes:

A5 HOUSEHOLD COMPOSITION

Household Structure	Non-Poor	Poor	Very Poor	Overall
Nuclear				
Female-Headed				
Extended				
Other				

Notes on Household Composition data

POVERTY, PRODUCTIVITY, AND EMPLOYMENT (cont.)

The poorest households are not necessarily the largest, but specifically those with a large number of young children, no wage earner or only a single wage earner, or only older members with no economically active children living at home. In many ways Dependency Burden is a better and more sensitive poverty indicator than household size and fertility rate.

It is, however, subject tot he vagaries of the definition of the term 'economically active' and needs to be evaluated alongside measures of unemployment and informal-sector income generation. It may be possible to obtain sub-city level data from the census, local surveys, employment data, electoral registers, housing, or even tax data. If such data are available, it would be useful to represent them on a map.

A6 Dependency Burden

-the ratio of working members to non-working members (dependants).

For each household, divide the number of economically active members by the number of economically inactive ones.

A7 Labor Force Participation Rate

-the percentage of adults who participate in the labor force.

A standard measure of labor market performance, more easily calculated and more reliable than the unemployment rate in many low-income developing countries.

A6 DEPENDENCY BURDEN

Ratio of those working to dependants	Non-Poor	Poor	Very Poor	Overall
Mean				
Median				

Jurisdiction:	
Year, Month:	
Source 1:	
Source 2:	
Notes:	

Notes on Dependency Burden

A7 LABOR FORCE PARTICIPATION RATE

Adults who participate in the labor force	Non-Poor	Poor	Very Poor	Overall
%				

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

Notes on Labor Force Participation Rate

POVERTY, PRODUCTIVITY, AND EMPLOYMENT (cont.)

WAGES AND EMPLOYMENT INDICATORS

At best, wages indicators are likely to be available only at city-level. More probably, they will be available only at national, or national-urban level. If any sub-city level wages data exist, it may be possible to compare wages in poor versus non-poor households.

A8   Wage Level

-the average hourly wage rate for all employed persons.

A9   Formal Sector Employment

-the percentage of the labor force employed in formal sector jobs.

This is a key measure of the stage of development of urban labor markets.

A10   Child Labor

-the percentage of children under 16 years who are employed full or part-time.

This is a measure of the structure of the workforce and an indirect measure of the (in)adequacy of educational opportunities and of the (in)effectiveness of child labor legislation.

ENTERPRISE ENVIRONMENT INDICATORS

A11   Enterprise Tenure Security

-the percentage of all enterprises which have a legal right to operate and either full rights of ownership or use.

Comprehensive, transparent and effective systems of property rights, together with an appropriate regulatory framework can stimulate business expansion. The converse is also true. This is an indicator of the degree to which incentives to start and expand enterprises may be suppressed because of inappropriate policies.

A12   Enterprise Financial Success

-the percentage of all enterprises with loans from formal financial institutions and/or publicly held equity financing.

This is an indicator of the degree to which the formal financial sector is providing a supportive context for business expansion.

A13   Regulatory Delay

-the average tome required to secure all approvals necessary to operate a commercial enterprise.

Regulatory impediments to establishing and operating businesses not only raise costs and lessen productivity, but also may result in decreased competition and greater industrial concentration in regulated industries, in turn increasing product costs and heightening cyclical sensitivity to demand shocks.

A8-10 WAGES AND EMPLOYMENT INDICATORS

A8	Wage Level	Average hourly wage-rate for all employed persons	
A8	Formal Sector Employment	Percentage of labor force employed in formal sector jobs	
A10	Child Labor	Percentage of children under 16 years employed full or part-time	

Notes on Wages and Employment Indicators

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

A11-13   ENTERPRISE ENVIRONMENT INDICATORS

A11	Enterprise Tenure Security	% of all enterprises with legal rights, etc.	
A12	Enterprise Financial Access	% of all enterprises with loans/equity	
A3	Regulatory Delay	Mean months required for approvals	

Notes on Enterprise Environment Indicators

Jurisdiction:
Year, Month:
Source 1:
Source 2:
Notes:

HELP NOTES

HOUSING INDICATORS

In marked contrast to the situation in rural areas, housing in cities housing is often the most important single issue for the poor. Housing factors (availability, stability of tenure, quality) principally determine where a family will live, and hence their access to employment, education, and a host of other social goods.

Most of the indicators are taken from the Extensive Survey Instrument of the Housing Indicators Program of the Untied Nations Centre for Human Settlements and the World Bank (1992), for which data are available in 53 cities in as many countries. These indicators are denoted by the numbers HIS.

More detailed definitions and instructions for deriving the indicators can be found in the HIS Extensive Survey Instrument. Since it may be difficult to find data (e.g. especially on median incomes, rents, house prices, etc.), careful notes should be provided explaining the origin of the data and any assumptions, extrapolations, and adjustments made.

If available, data on housing at the sub-city level should also be provided.

B1 House Price to Income Ratio (HIS 5)

-the ratio of the median free-market price of a dwelling unit to the median annual household income.

If Median Income data are unavailable, it may be necessary to take a national urban figure. If mean, but not median, income data are available, it may be possible to obtain a median/mean ratio from some national or specific survey, or rely on the finding from research in many developing countries that median incomes are generally about 70 percent of the mean.

The house price to income ratio is possibly the most important summary measure of housing market performance, indicating not only the degree to which housing is affordable by the population, but also the presence of market distortions. When abnormally high, it often indicates severe supply-side restrictions; when low, lack of effective demand attributable to limited or insecure property rights.

B2 Rent to Income Ratio (HIS 6)

-the ratio of the median annual rent of a dwelling unit to the median household income of renters.

If only data on the median ratio of rents to incomes are available, they may be used instead.

The rent to income ratio is a key measure of affordability. When it is high it may also indicate the presence of supply side distortions; when it is low, it may indicate the presence of rent control, which may depress rates of production, maintenance, and investment.

B1 HOUSE PRICE TO INCOME RATIO (HIS 5)

B2 RENT TO INCOME RATIO (HS 6)

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
B1	Ratio				
B2	Ratio				

Notes on Access to House Price and Rent to Income rations

HOUSING INDICATORS (cont.)

B3 Housing Production (HIS 3)

-the net number of units produced (units produced minus units demolished) in both the formal and informal sectors per 1000 population.

Housing production is a traditional measure of ability of the housing supply system to increase and replenish stock, but fails to take account of either average household size or the rate of household formation. Alternative measures can compare relative rates of household formation and housing stock increase (possibly also accounting for demolitions and modifications to the existing stock).

B4 Floor Area per Person (HIS 8)

-the median usable floor area in square metres per person.

Floor area is that of habitable rooms, including bathrooms, internal corridors and closets, and including inner courtyards or verandas if these are used for cooking, eating, sleeping, or other domestic activities. If the median cannot be estimated, provide the mean instead. It may be possible to estimate the median from household survey results. In the absence of any other data, the area of the median-priced dwelling unit should be used as an approximation.

This indicator measures the adequacy of living space in dwellings. A low value for the indicator is a sign of overcrowding. Alternative measures are person per room and households per dwelling unit.

B5 Permanent Dwelling Units (HIS 9)

-the percentage of dwelling units likely to last twenty to last twenty years or more given normal maintenance and repair, taking into account locational and environmental hazards (e.g. floods, typhoons, mudslides, earthquakes).

This indicator is one measure of the quality of housing, particularly of its durability. Permanent structures usually provide better protection from the elements and a higher standard of structural safety, and require a higher level of initial investment.

B6 Unauthorized Housing (HIS 12)

-the percentage of the total housing stock in the urban area which is not in compliance with current regulations.

This indicator measures the extent to which the urban population is housed legally. It includes both squatter houses occupying land illegally, and houses constructed without the required

building, land use, or land subdivision permits. High values depress incentives to invest in housing and indicate difficulty in establishing collateral value for mortgage loans.

B3 HOUSING PRODUCTION (HIS 3)
B4 FLOOR AREA PER PERSON (HIS 8)
B5 PERMANENT DWELLING UNITS (HIS 9)
B6 UNAUTHORIZED HOUSING (HIS 12)

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
B3	Units				
B4	m²				
B5	%				
B6	%				

Notes on Access to Housing Indicators

HELP NOTES
TRANSPORT, PRODUCTION, AND MARKET INFRASTRUCTURING

Transport costs are usually a significant component of the weekly expenditure of poor households (in some extent sudden fare increases have sparked widespread rioting). High public transport fares, long journey ties, and low reliability are major constraints on the free labor market, and a deterrent to uptake of education for children and training opportunities for adults. Poor neighborhoods are often clustered on the urban periphery, with direct connections, if any, only to the city center. Journeys to work may involve several interchanges, with long delays and additional fares payable at each. At night, services to poor areas tend to be infrequent or non-existent, and taxis are often unwilling to make a journey outside the city center, with no guarantee of a return fare. They may also refuse to enter high-crime areas, especially at night.

Measuring access to transport is extremely difficult, unless appropriate neighborhood or household-level surveys have been made. City-level data alone are unlikely to be informative. Maps are likely will only be apparent at the sub-city level.

C1 Access to Public Transport by the Urban Poor

-the percentage of employed members of poor households who rely on public transport for trips to work.

This indicator can show the degree to which the poor are under-served by public transport, with implications for labor force participation and transport cost and time.

C2 Average Journey Time to Work

This indicates general quality of work journey, combining effects of spatial dispersion, congestion, network density, etc.

C1 ACCESS TO PUBLIC TRANSPORT BY THE URBAN POOR
C2 AVERAGE JOURNEY TIME TO WORK

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
C1	%				
C2	Mins				

Notes on Access to Transport

HELP NOTES

SERVICES AND SOCIAL INFRASTRUCTURE INDICATORS

Access, or the lack of it, to basic services is a major determinant of poverty. The poor not only typically obtain much less of certain basic essentials (e.g. drinking water), but often have to pay far more for them than those who live in more affluent neighborhoods.

In many urban areas, even where ample water is in theory available, delivery to peripheral, marginal, or new communities is variable and restricted in time, reliability, quality, and quantity. Th existence of piped connections is no guarantee that water will be available. Many poor households have to purchase pumps to extract water from mains with insufficient pressure, and may have to use secondary sources (e.g. tankers or vendors) at particular seasons or times of day. Data from any surveys of delivery should be included, as well as available at the sub-city level.

D1 Access to water by urban poor

-the percentage of poor households with a plot or dwelling connection to piped water, or other source of domestic water.

Give the percentage of households receiving their principal supply of water from each of the identified sources. Precise breakdowns will depend on the data available.

Piped	Implies pipes connecting a main supply to the dwelling or plot
Stand-pipe	A communal tap or spigot serving a number of houses
Tanker/vendor	Water supplied by tanker lorry or vendors on foot or with carts
Well/Borehole	Water extracted from a well or borehole for collection at a communal site
Natural	Ponds, lakes, streams, rivers, etc.

Access to piped water is associated with both better health and time savings associated with less collection time. It has important implications for women and children. It is also associated with de facto tenure security in many cases.

D1 Access to Sewerage by Urban Poor

-the percentage of population served by different types of provision for water supply and sewage disposal.

Precise breakdowns will depend on the data available.

Main sewer	A piped sewage disposal system

Wet septic tank   Septic tanks, access pools, soak pits, etc.

Dry latrine   The various forms of dry pit latrine

None   Buckets, open-air defecation, etc.

Access to adequate sewerage arrangements is a major contributor to public health; its absence is one of the commonest concomitants of poverty.

D1 ACCESS TO WATER BY URBAN POOR
D2 ACCESS TP SEWERAGE BY URBAN POOR

INDICATOR				SOURCE		
	Type	Units	Value	Jurisdiction	Year, Month	Source
D1	Piped	%				
	Stand-pipe	%				
	Tanker	%				
	Well/bore	%				
	Natural	%				
D2	Main sewer	%				
	Wet septic tank	%				
	Dry Latrine	%				
	None	%				

Notes on Access to Water and Sanitation Services

HELP NOTES

SERVICES AND SOCIAL INFRASTRUCTURE INDICATORS

(Water, Sanitation, Solid Waste and Electricity)

D3 Average Time Spent in Fetching Water

-the time per day in minutes spent fetching water by households with no piped connection to main water supply.

This reflects the time constraint imposed on individuals in the household because of inadequate public provision of basic services, which has serious implications on the use of productive labor.

D4 Water Quantity

-production/consumption in litres per capita per day.

This indicator provides information on adequacy of water production and ability of utility to provide water on demand.

D5 Water Quality

-percent of water supplied that meets country's drinking water standards.

In the absence of a nationally agreed standard, a WHO or other suitable standard may be taken, depending on the availability of data.

Combined with previous indicators, this provides a picture of service quality.

D6 Water Supply Reliability

-percentage of population receiving water supply on demand, 24 hours per day.

D7 Sewage Treatment Rate

-percentage/degree of waste that is treated.

D8 Sewerage Reliability

-percentage of population subjected to periodic flooding/backups

Combined with service coverage indicator this provides information on quality of sewerage services.

ii   Solid Waste Disposal

D9 Access to Solid Waste Collection

-percentage of households with regular (e.g. weekly or more often) waste collection.

Adequate waste removal is associated with a number of public health benefits, both direct and indirect (e.g. lower likelihood of blockage of drainage systems).

iii   electricity Supply

D10   Access to Electricity Supply

-the percentage of poor households with a dwelling connection to electricity.

Access to electricity is important for the poor both because of its direct benefits and because gaining access is often a first step toward tenure security.

D3 AVERAGE TIME SPENT IN FETCHING WATER
D4 WATER QUANTITY
D5 WATER QUALITY
D6 WATER SUPPLY RELIABILITY
D7 SEWAGE TREATMENT RATE
D8 SEWERAGE RELIABILITY
D9 ACCESS TO SOLID WASTE COLLECTION
D10 ACCESS TO ELECTRICITY SUPPLY

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
D3	mins.				
D4	li. per cap. per day				
D5	%				
D6	%				
D7	%				
D8	%				
D9	%				
D10	%				

Notes on Access to Water and Sanitation Services, Solid Waste Collection and Electricity

SERVICES AND SOCIAL INFRASTRUCTURE INDICATORS: HEALTH

D11   Access to Health Services

-the percentage of poor households in which any member visited a doctor or nurse in the previous year.

This can indicate the degree to which the poor are under-served by health services, with implications for health of the poor and subsequent implications for labor force participation and employment.

D12   Infant Mortality

-per 1000 deaths

D13   Under-Five Mortality

-per 1000 deaths

Children's health and nutritional status is a key poverty is a key indicator. UNICEF and others view Under-Five Mortality Rate as the best and most complete indicator of changes in children's health status. It is more sensitive to short-run economic variations than is life expectancy, and is not subject to cultural biases, such as the age of weaning, which affect the infant mortality rate. However, data supplied is often extrapolated rather than based on actual observation.

D14   Immunization Coverage

-the percentage of children immunized by 12 months of age.

Use WHO Expanded Immunization Program definitions and criteria. In many cities data may be available at the sub-city level, at least for some neighborhoods, especially where specific immunization campaigns are or have been undertaken. Collect and include such data wherever possible.

Trends in immunization coverage may indicate short-term changes in access to health services. However, since immunization is often the responsibility of a single department or agency, very specific or localized budget or administrative changes can have major effects on this indicator, and do not necessarily reflect the situation of health provision as a whole. Conversely, according to WHO, the management skills necessary for effective immunization services also help in managing other aspects of more comprehensive health programs, which suggests that other aspects of a primary health care system can be monitored through the data on immunization coverage. Data are widely available through UNICEF, WHO, and national governments. (World Bank, 1993:25)

The poor benefit disproportionately from effective immunization coverage, because poor nutrition, housing and environmental factors make their children more susceptible to infection if not immunized; while their lack of access (and the means to purchase access) to adequate medical care renders infected children more prone to serious or fatal outcomes.

D11   ACCESS TO HEALTH SERVICES
D12   INFANT MORTALITY
D13   UNDER-FIVE MORTALITY
D14   IMMUNIZATION COVERAGE

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
D11	%				
D12	Per 1000				
D13	Per 1000				
D14	%				

Notes on Access to Health Services Indicators

SERVICES AND SOCIAL INFRASTRUCTURE: HEALTH (CONT.)

D15   Child Malnutrition

-the percentage of children aged one through four who are malnourished according to WHO criteria.

Malnutrition, especially among the most vulnerable family members, is generally a bottom-line indicator of family welfare. It is defined as the percentage of children, usually one through four years old, of less than two standard deviations of the reference median WHO standards. Nutrition data are sensitive to short-term economic and policy changes. (World Bank, 1993:26)

D16   Female-Male Expectancy Ratio

-the ratio of the number of years life expectancy at birth for a female to that for a male.

In urban poor households, women are often the sole or principal breadwinner, and typically undertake almost all the care for children, sick and elderly. Their health (in which their fertility plays a significant part) is crucial for the health of the households which depend upon them. Data on any or all of these indicators may be available at the sub-city level, usually as part of specific health surveys or programs, undertaken by government or NGO agencies. Collect and report any sub-city level data available. Such studies of individual areas or communities may yield income/poverty data for cross-tabulation.

The Female/Male Life Expectancy at Birth *ratio is a good summary measure of women's status in society. Normally women outlive men. In high-income countries, women live an average of six years longer than men. In low-income countries, they live only two years longer. The indicator needs to be viewed against appropriate norms.*

D17   Total Fertility Rate

-the number of children a woman would bear if she were to live to the end of her childbearing years and bear children at each age in accordance with prevailing age-specific fertility rates.

D18   Maternal Mortality Rate

-deaths per 1000 in the prenatal period.

Among poor women, the most frequent cause of death is unattended childbirth. The maternal mortality rate is an indicator of poor women's access to basic health services.

D15   CHILD MALNUTRITION
D16   FEMALE-MALE LIFE EXPECTANCY RATIO
D17   TOTAL FERTILITY RATE
D18   MATERNAL MORTALITY RATE

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
D15	%				
D16	Ratio				
D17	Children				
D18	Per 1000				

Notes on Access to Health Services Indicators

HELP NOTES

SERVICES AND SOCIAL INFRASTRUCTURE: EDUCATION

School enrollment rates are fairly widely available, are likely to be more reliable than literacy or completion rates, and reflect changes without time-lags. They should show the proportion of the relevant age cohort attending primary or secondary school, corrected for repeaters and over-age students. However, problems of attendance, distribution and quality of schooling are not picked up by this indicator, which should be supplemented, where possible, by information on student-teacher ratios, drop-out rates, number of students per school, and public expenditure levels and trends (World Bank, 1993:24). Gender and regional differences should be explicitly noted.

D19   Access to education by Urban Poor

-the percentage of children of households attending school.

Associated with upward mobility and future income-earning possibilities among the poor. This indicator can show service deficiencies in provision of education.

D20   Net Enrollment Rate in Primary School

D21   Net Enrollment Rate in Secondary School

-the percentage of the relevant age cohort (determined by the local legal or normal age for starting school, extended for the normal number of years in primary school - usually 6 - and corrected for repeaters and over-age students) actually enrolled in Primary/Secondary School.

D22   Illiteracy Rate

-the percentage of the population (age 15+) with no schooling (i.e. cannot read or write)

D23   Pupil-Teacher Ratio Primary

D24   Pupil-Teacher Ratio Secondary

D25   Drop-out Rate Primary

D26   Drop-out Rate Secondary

-the percentage of primary school entrants who fail to complete the full term (normally 6 years of primary, 4 or more years of secondary school), corrected for those who move to another school or out of the area.

D19   ACCESS TO EDUCATION BY URBAN POOR
D20   NET ENROLLMENT RATE IN PRIMARY SCHOOL
D21   NET ENROLLMENT RATE IN SECONDARY SCHOOL
D22   ILLITERACY RATE
D23   PUPIL-TEACHER RATIO PRIMARY
D24   PUPIL-TEACHER RATIO SECONDARY
D25   DROP-OUT RATE PRIMARY
D26   DROP-OUT RATE SECONDARY

INDICATOR				SOURCE		
	Units	Value/Boys	Girls	Jurisdiction	Year, Month	Source
D19	%					
D20	%					
D21	%					
D22	%					
D23	Ratio		n/a			
D24	Ratio		n/a			
D25	%					
D26	%					

Notes on Access to Education Indicators

HELP NOTES

AFFORDABILITY AND LEVEL OF SERVICES

Obtaining urban and social infrastructure services can be a significant financial burden on residents. It is possible to focus particularly on the poor by taking measurement for a given income decile, or for households at the defined poverty level.

E1 Percent of Income of Poor Households Spent on Various Service

-this indicator will only be obtainable if household income and expenditure survey data are available. It may be given for the urban population as a whole, for a given income decile, or for households below a defined Poverty Line.

F1 Infrastructure Expenditure Ratio

-the ratio of total expenditures (operations, maintenance and capital) by all levels of government (including private utilities and parastatals) on infrastructure services (roads, sewerage, drainage, water supply, electricity and garbage collection).

This indicator is an indirect measure of the supply of infrastructure for residential development. Low levels of infrastructure expenditures, by contrast, result in land supply bottlenecks and thus in higher prices for land and housing. They also result in inadequate provision of residential amenities, such as water, sewerage, drainage and electricity, and in subsequent traffic congestion, all of which have a direct effect on the quality of housing.

E1 PERCENT OF INCOME OF POOR HOUSEHOLDS SPENT ON:
    A   WATER
    B   ELECTRICITY
    C   SOLID WASTE COLLECTION
    D   HEALTH
    E   EDUCATION
    F   TRANSPORT

F1 INFRASTRUCTURE EXPENDITURE RATIO

INDICATOR				SOURCE		
		Units	Value	Jurisdiction	Year, Month	Source
E1	a. Water	%				
	b. Electricity	%				
	c. Waste	%				
	d. Health	%				
	e. Education	%				
	f. Transport	%				
F1		Ratio				

Notes on Affordability and Provision

HELP NOTES

GENDER SPECIFIC INDICATORS

For Gender-Education differences, see Section D, above.

G1 Urban Female-Headed Households in Poverty

-the percentage of female-headed households below poverty line

Indicative of the extent of poverty among a group with often qualitatively different requirements in terms of poverty interventions.

G2 Gender Wage Equity

-the ratio of female-to-male wage rates for all employed workers.

A measure of structural problems in the labor market which may reflect inadequacies in educational or training opportunities for girls and women, discriminatory behavior by employers, or lack of effective legislation and enforcement. Influences income and labor force participation directly.

G3 Gender Labor Force Participation Equity

-the ratio of female-to-male labor force participation rates

A direct determinant of earnings of women, possibly reflecting the same structural inadequacies described for the previous indicator.

G4 Woman Owner-Occupied Housing

-percentage of dwelling units owner-occupied by women

Measures the equal access of women to land tenure rights

G5 Asset Ownership by Women

-percentage of owners of land or property who are women

Any suitable register(s) of land or property-ownership will serve as data

Reflects the existence of barriers to women in acquisition of assets and property, productive and non-durable goods.

G   GENDER-SPECIFIC INDICATORS
G1 URBAN FEMALE-HEADED HOUSEHOLDS IN POVERTY
G2 GENDER WAGE EQUITY
G3 GENDER LABOR FORCE PARTICIPATION EQUITY
G4 WOMAN OWNER-OCCUPIED HOUSING
G5 ASSET OWNERSHIP BY WOMEN

INDICATOR			SOURCE		
	Units	Value	Jurisdiction	Year, Month	Source
G1	%				
G2	Ratio				
G3	Ratio				
G4	%				
G5	%				

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