

# Epilogue

## Urban Indicators

[www.unchs.org/programmes.html](http://www.unchs.org/programmes.html)

### Data Adequacy

There is almost complete unanimity among local and national governments and planning agencies that accurate, timely and policy-relevant data are a prerequisite for good governance, good planning and good management. However, the capacity of many countries and cities to design and articulate their data requirements, to access and obtain the appropriate data and to use it for policy design and monitoring is often inadequate.

For local authorities, the absence of reliable data and the capacity to use that data means that planning decisions are being made in the dark. There is no basis for problem solving, visioning or management by objectives and it is often impossible to form a consensus as to what the real situation is. For the private sector, no local data means a scattergun approach to investment with poorer business plans and increased risk, uncertain supply conditions and less market awareness. For the community and constituents, good data means feedback, transparency and the ability to conduct advocacy on local issues and assess the performance of government.

The problem is not so much the quantity of data, since many statistics are being provided by a whole range of data providers in the public and private sectors and through one-off specialized studies, but rather in how to apply it to the most pressing problems at the time it is needed and how to identify emerging trends upon which action is required. This is true in a large number of cities from developed and developing countries alike.

Some of the problems include:

- Lack of local level skills to collect and analyze fresh data and to conceptualize data needs;
- Administrative data appropriate for daily operations is not always suitable for policy, but resources to rework the data are not available;
- Political bias in the collection and presentation of data;
- Poor consultation between national agencies and local governments regarding data requirements;
- Lack of capacity at the national level to disaggregate information for local analysis;
- While social data are often locally available, local economic data are usually poor;
- Lack of funding for data collection, as political leaders see little benefit in an accurate picture of

the urban reality;

- Few rewards for good practice, leading to loss of staff from local or government agencies when they gain skills that can pay better in the private or international sectors.

The Urban Indicators Programme and the Global Urban Observatory within UNCHS (Habitat) have attempted to address the need for city-level data through a consistent, harmonized set of indicators relating to key urban issues, that can be assessed at any spatial level. These indicators are intended to help city managers and local agencies prioritize needs and actions in line with urban objectives or strategy plans.

The indicators used in this report were collected in 1995-6 for 237 cities using **1993 data**, and in 2000-1 for 151 cities using **1998 data**<sup>1</sup>. These data sets allow comparison between countries and cities as to the relative speed at which problem areas are being addressed and clues as to why there are inter-city and inter-country differences in dealing with the problems. They are also intended to provide baseline data for cities to focus their own data collection efforts and to provide benchmarks from similar cities that can assist in identifying problem areas. Another important usage of indicators is in the development and exposition of national sectoral strategies or city action and development plans, such as various rapid assessment techniques offered by different agencies.

### International data provision

The official source of national data used in international comparison is National Statistical Offices coordinated through the United Nations Statistical Division. Such data have the advantage of negotiated international protocols and definitions, and formal approval from national governments. With few exceptions, in practice, these data are not very useful for analysis because they are usually out of date, incomplete, and, apart from demographics and economic aggregates, they are seldom directed towards key policy concerns. They are, moreover, usually not available at the local or city level.

A related constraint is the frequent long gaps (mostly 10 years) in the timing of government census and other surveys, as well as the delay in processing and publishing the data. Such time periods may not be

‘They say that figures rule the world. I do not know if this is true, but I do know that figures tell us if it is well or poorly ruled.’

*Goethe (German writer),  
1814*



# On Evidence

‘The government ministries are very keen on amassing statistics. They collect them, raise them to the  $n$ th power, take the cube root, and prepare wonderful diagrams. But you must never forget that every one of these figures comes in the first place from the village watchman, who just puts down what he damn well pleases.’

*Stamp (English economist), 1911*

appropriate for measuring many aspects of urban interdependency and dynamics such as land prices and housing affordability.

Various international bodies now provide more complete and timely sectoral data through their own networks and local agencies. Chief among these are UNDP through their Human Development Reports, ILO, UNESCO, WHO, IEA, the World Bank and organizations such as OECD, OPEC, etc. The means by which these data are sourced is often opaque and may involve estimation rather than confirmed figures, but they are usually up-to-date and ‘good enough for policy purposes.’

## Methodological approach to implementing the present collection

The present collection, like all previous UNCHS (Habitat) indicators efforts, has operated under a third, relatively low-cost model that does not require a formal international network. Cities are invited to participate. In those cities that respond, a consultant is hired to obtain data, make estimates of data not directly available (using UNCHS or their own methodology), document the results and provide other reports as necessary. Regional contracts were also let to consulting organizations to locate the cities, hire the local consultants and assemble the data. This methodology, in theory, has the advantages of both independence and control. Consultants can also be required to correct their data, document their methods, explain divergences with other sources etc. In practice however, the main problems have been: a) sample design; and b) quality control.

## Conclusions

Habitat’s urban indicators collections comprise the only truly international database providing a full range of comparative information on city conditions and policy, using standardized definitions and instruction sets. Two collection rounds have now been undertaken, using slightly different methodologies. The main conclusion is that comparative city data can definitely be collected by this method, but the quality of results tends to reflect the abilities, perspective and diligence of the local consultants more than the actual data situation in the country. If it is possible to make a mistake or misinterpret an indicator, such a mistake *will* be made repeatedly and by a significant proportion of the collectors. This puts a heavy load on central office to correct data that are clearly wrong; to estimate results when partial data have been provided; to create internal consistency with other indicators and with past collections; and to harmonize the data with national and other sources.

Generally, local and city data can be improved by:

- Supporting data and indicator-related initiatives for local government, including management information systems and capacity building;
- Including data improvement components in larger infrastructure or capacity building programmes;
- Providing a modern GIS base for future national census collections, which will permit the display of small-area data;
- Documenting examples of good practice in local data use, and encouraging local benchmarking initiatives; and
- Developing flexible software solutions which can be rapidly adapted for use in those local governments with computer networking capability.

## The problems of poor data at the national level

At the national level, data sources are often poorly coordinated between different agencies and the potential for the most expensive planning mistakes due to data misuse exists at this level. Poor data and methodology can cause gross errors in national and city planning and wasteful funds distribution. A few examples of misuse of national data include the following:

- **Political influence** The official population of one African country fell by 10 million overnight when it was discovered that all regions had been overestimating their populations because funding was distributed on this basis.
- **Lack of policy direction** One data-rich city known to have very poor transport conditions has never conducted a survey of transport usage, but conducts around 15 other annual surveys including a survey of dog ownership. One reason put forward by local planners for the lack of interest in transport data is that it might interfere with complex machinations surrounding very large infrastructure projects.
- **Poor methodology** Some \$4 billion of Asian crisis recovery money was distributed almost entirely to rural areas in one country on the basis of poverty estimates that did not allow for higher urban costs and which found almost no urban poverty. Most of the crisis impacts were in fact in urban areas.

# Epilogue

## The City Development Index (CDI)

### What does the CDI measure?

There are a number of concepts relating to cities and urban development that, although complex and multifaceted, are meaningful and desirable to measure. These include: development level, liveability, sustainability, relative disadvantage or poverty, congestion and inclusiveness. These multidimensional ideas cannot be encompassed by a single indicator but require a combination of different indicators - corresponding to different aspects of development or city performance - to form an index. The two most useful urban indices discovered to date have been the City Product per person, which is analogous to the GDP at the city level, to give the economic output of the city, and the City Development Index (CDI).

The CDI is defined at the city level and could also be taken as a measure of average well-being and access to urban facilities by individuals. The high statistical significance and usefulness of the index indicates that it is actually measuring something real. It appears that the CDI is actually a measure of depreciated total expenditure over time on human and physical urban services and infrastructure, and it is a proxy for the human and physical capital assets of the city. There is some support for this idea, in that more expensive services such as water treatment tend to be more heavily weighted. This cannot be confirmed with the present data, but it seems likely that a monetary cost can be associated with lifting the CDI by a percentage point.

The City Development Index was developed as a prototype for Habitat II to rank cities according to their level of development. It is used in this report as a benchmark for comparative display of several of the key indicators from the UNCHS (Habitat) Global Urban Indicators Database. The CDI is, to date, the best single measure of the level of development in cities.

### CDI components by Region:

Region	CDI	sub-indices				
		City Product	Infra-structure	Waste	Health	Education
Africa	42.85	49.69	36.17	26.04	50.39	51.96
Arab States	64.55	66.52	69.79	45.87	77.18	63.39
Asia-Pacific	65.35	62.90	67.75	44.40	78.27	73.43
HIC	96.23	90.60	99.21	100.00	94.26	97.10
LAC	66.25	62.93	70.42	39.50	82.71	75.68
Transition countries	78.59	71.62	90.64	55.93	85.80	88.94

1998 data

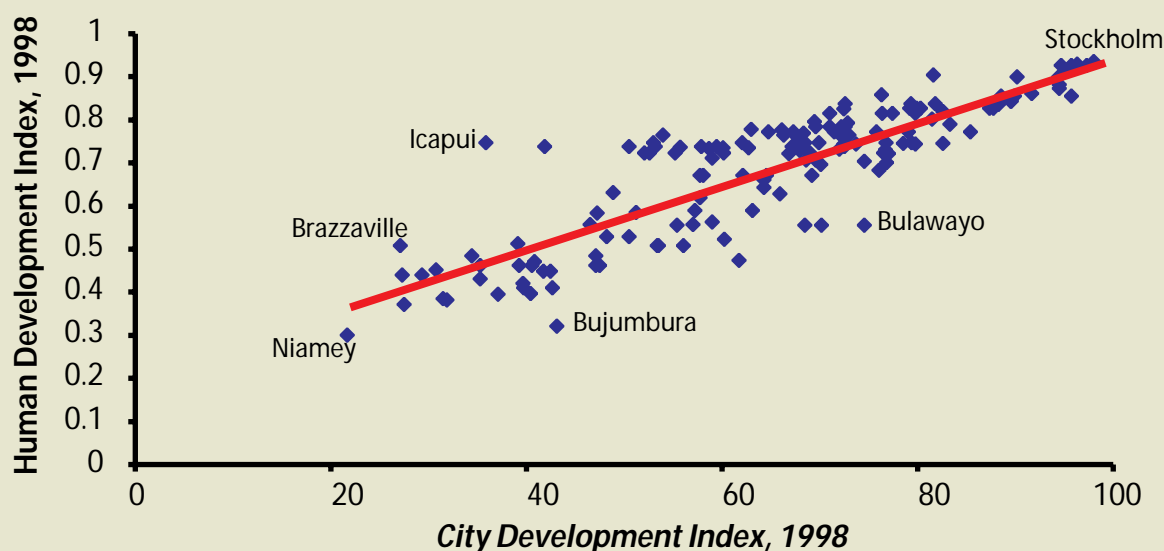
### CDI components for selected cities:

Region	CDI	sub-indices				
		City Product	Infra-structure	Waste	Health	Education
Stockholm	97.4	93.5	99.5	100.0	94.0	99.8
Melbourne	95.5	90.0	99.8	100.0	93.7	94.1
Singapore	94.5	91.6	99.5	100.0	92.7	88.6
Hong Kong	92.0	89.4	99.3	99.0	90.9	81.3
Moscow	89.9	81.0	98.7	86.8	83.8	99.3
Seoul	86.0	65.3	98.4	100.0	88.7	77.7
Rio de Janeiro	79.4	82.3	86.2	62.6	81.9	84.3
Sofia	79.1	70.9	93.7	58.5	86.2	86.3
Hanoi	74.2	59.6	72.0	90.0	80.6	69.0
Havana	71.0	65.0	74.8	50.0	80.7	84.7
Jakarta	69.2	66.2	57.3	46.7	80.2	95.7
Ulaanbaatar	68.4	53.7	59.0	90.0	72.5	66.7
Lahore	61.1	71.1	78.5	50.0	64.9	40.8
Colombo	58.4	46.9	68.6	45.0	86.2	45.3
Bangalore	58.0	51.1	82.7	31.3	76.5	48.5
Dhaka	48.4	55.6	45.3	27.5	64.6	48.7
Vientiane	47.1	44.0	58.0	0.0	62.3	71.3
Accra	46.6	49.4	50.0	0.0	71.4	62.0
Phnom Penh	43.5	40.2	33.0	27.0	47.2	69.9
Port Moresby	39.3	69.0	18.1	10.0	59.1	40.2
Lagos	29.3	42.1	29.5	2.0	44.0	29.1
Niamey	21.7	40.0	22.0	0.0	78.3	14.9

1998 data

# On Evidence

## City Development versus Human Development



### How is the CDI Constructed?

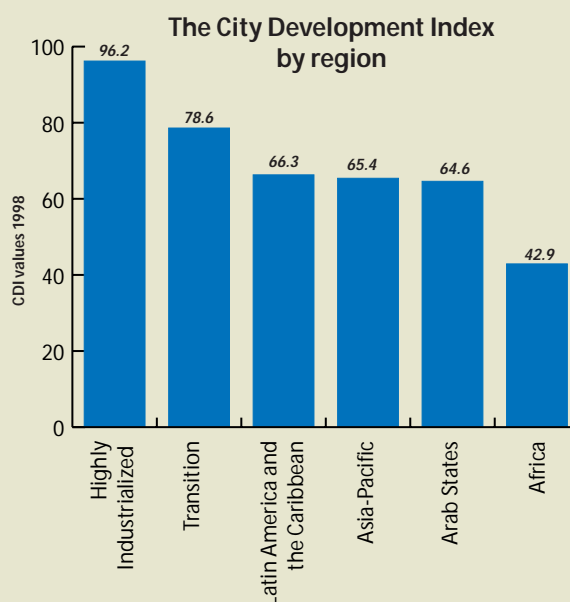
The technique used to construct the City Development Index is similar to that used by UNDP for their Human Development Index. Separate sub-indices are constructed and combined to create a composite index. Thus, the CDI is based on five sub-indices - City Product, Infrastructure, Waste, Health and Education - the values of which range from 0 to 100:

### City Development *versus* Human Development

The CDI correlates well with the national Human Development Index (HDI), but because there is considerable variation between cities in any particular country, it provides a better measure of real city conditions than the national-level HDI.

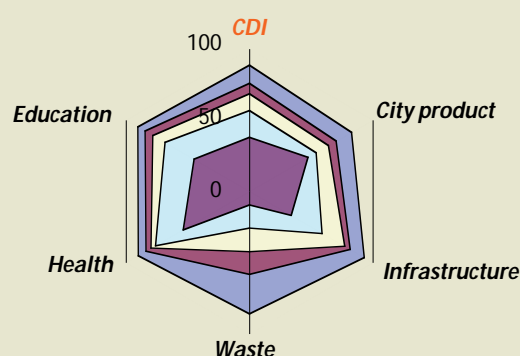
The City Development Index is used in several sections of this report to show how the values of indicators vary by city development quintile. Each quintile contains 20 percent of all cities in the database, arrayed from lowest to highest CDI values according to a scale ranging from 0 to 1. The City Development Index is a fine predictor of its constituent variables. It is, moreover, usually a better measure than either city product or the national HDI as predictor of a range of other variables at the city level.

The CDI has been cited as a good index of **urban poverty** and **urban governance**. Health, education and infrastructure components are particularly good variables for measuring poverty outcomes in cities. Similarly, infrastructure, waste and city product components are key variables for measuring the effectiveness of governance in cities. The CDI correlates strongly with the city product; other things being similar, a high-income city will have a higher CDI.



# Epilogue

## The City Development Index (CDI)



- High (Q5)
- Medium-high (Q4)
- Medium (Q3)
- Medium-low (Q2)
- Low (Q1)

The five sub-indices of the CDI increase at different rates as the CDI increases. As this graph shows, the two best performing areas are the HDI components, health and education. Satisfactory levels of performance are reached on the health index for all but the bottom 20 percent of cities, and for the education index above the bottom 40 percent. This demonstrates the very strong development emphasis placed on these social areas, and their relative ease of improvement. Conversely, urban waste management is the weakest area, starting from low levels and not gaining a good score until the top 20 percent of cities. A number of otherwise developed cities score poorly on this component. City product, representing the private sector or economic component of city investment, is also slow to improve.

An important revelation has been that many cities do perform better or worse on the City Development scale relative to their city product, clearly hinting at the fact that 'policy matters.' That is, if cities have invested in physical and social infrastructure, dividends will be received in those and other areas of city development.

### Calculating the City Development Index

The City Development Index is calculated according to the formulae in the table below. It has separate sub-indices for Infrastructure, Waste Management, Health, Education, and City Product, which are averaged to form the CDI. Each sub-index is a combination of several indicators that have been normalized to give a value between 0 and 1.

Because the variables used to make up the CDI are strongly related to each other, there are a number of ways to calculate the CDI that give almost identical results. For this report, the weightings given to each indicator have been initially calculated by a statistical process called Principal Components Analysis and then simplified. This formulation of the index by and large uses the same formulae as in UNDP Human Development Report (1999), for the Health, Education and City Product sub-indices.

For meaningful ranking of cities, the index requires data that are essentially complete, robust and precise - so not many variables are suitable. All the underlying data had to be checked for accuracy and completeness. Where there were missing data or based on very inaccurate estimates, they were either replaced by data from another national city of similar size, by country-wide figures (or national urban data, if available) or by figures for a nearby city or place at a similar level of development (but only if absolutely necessary). Also, *Formal waste disposal* or *Wastewater treated* is taken as zero if not provided. Where City Product was not provided, it was calculated so that  $City\ Product \times Household\ size = 0.45 \times Mean\ Household\ Income$  (which is similar to the main estimation formula). For most transition countries 0.35 x Household Income is used since, in transition economies, much GDP goes into indirect services and subsidies. The resultant city products must be somewhere in the vicinity of the National GDP per person, otherwise household incomes are presumed incorrect and adjusted.

### Calculating the CDI

Index	Formula
Infrastructure	$25 \times \text{Water connections} + 25 \times \text{Sewerage} + 25 \times \text{Electricity} + 25 \times \text{Telephone}$
Waste	$\text{Wastewater treated} \times 50 + \text{Formal solid waste disposal} \times 50$
Health	$(\text{Life expectancy} - 25) \times 50/60 + (32 - \text{Child mortality}) \times 50/31.92$
Education	$\text{Literacy} \times 25 + \text{Combined enrolment} \times 25$
Product	$(\log \text{City Product} - 4.61) \times 100/5.99$
City Development	$(\text{Infrastructure index} + \text{Waste index} + \text{Education index} + \text{Health index} + \text{City Product index})/5$

# On Evidence

## Examples of cities with higher or lower CDI than expected from city product (\*)

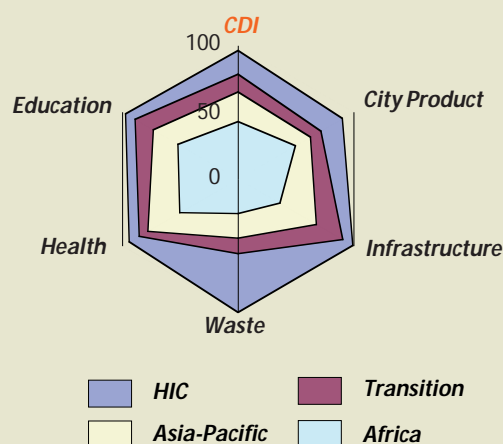
### High performers

Cuenca	Ecuador
Santo Andre	Brazil
Bourgas	Bulgaria
Chisinau	Moldova
Seoul	Korea
Medan	Indonesia
Tena	Ecuador
Novomoscowsk	Russian Federation
Ulaanbaatar	Mongolia
Hanoi	Vietnam
Kumasi	Ghana
Cajamarca	Peru
Tbilisi	Georgia
Amal	Sweden

### Low performers

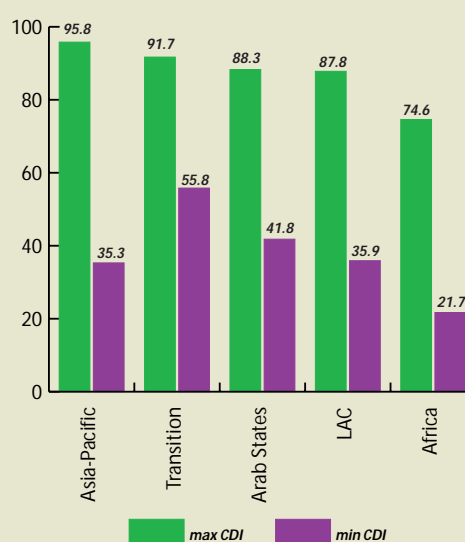
Lagos	Nigeria
Tangail	Bangladesh
Conakry	Guinea
Kigali	Rwanda
Bangui	Central African Republic
Lome	Togo
Abidjan	Cote d'Ivoire
Baghdad	Iraq
Niamey	Niger
Monrovia	Liberia
Nouakchott	Mauritania
Asuncion	Paraguay
Kinshasa	Congo, Dem. Rep.
Port Moresby	New Guinea

Note: (\*) as expressed by large differences in rank when ranking is undertaken using each variable.



The above graph shows the comparative size of the various components of the City Development Index for four regions. Although the regions are generally ordered from least-developed to highly developed, there are also particular areas in which regions are relatively weak. Overall, the transition countries' cities are good in most social and physical infrastructure categories, but weak in incomes and economic product. African cities have a particular weakness in physical infrastructure. Waste disposal is a problem throughout the developing world.

Minimum and Maximum CDI for cities by region, 1998

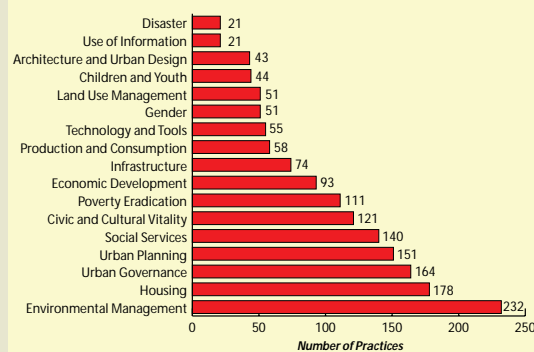


# Epilogue Best Practices

## The Best Practices Database

Good and best practices are initiatives undertaken by two or more partners at the national, city or community level that effectively address chronic social, economic and environmental problems. The UNCHS (Habitat) Best Practices Database, the source of many of the examples in this report, includes over 1,150 initiatives from 125 countries documented between 1996 and 2000. The mining of this rich database reveals trends and issues, emerging priorities and promising policy responses throughout the world. A breakdown by category shows that environmental problems are receiving the most attention by communities and local authorities worldwide. Housing, urban governance, urban planning and social services closely follow. These innovative approaches and solutions show that partnerships between local authorities and civil society organizations constitute a potent capacity of response to critical issues and problems. They also reveal a policy vacuum, as many of these initiatives are taking place with little or no central government support.

### 1000+ Best Practices: Environment, housing and governance top the list



Source: [www.bestpractices.org](http://www.bestpractices.org)

## Innovative Responses to Globalization

Globalization in the form of liberalized trade and finance has led to several types of response in cities around the world. Cities - particularly city-regions - in developing countries have realized that strategies that will allow them to effectively compete for foreign and domestic investment and tourism are best activated through social, economic and environmental policies that benefit, first and foremost, their own citizens. In countries where levels of infrastructure and

services are already high, cities and their regions are now turning their attention to their social and cultural assets. This trend is exemplified by investments in museums, festivals and special events, including those rooted in ethnic diversity. Other practices focus on preserving and rehabilitating the cultural heritage and natural endowments, including watersheds, wildlife and eco-systems.

In the transition economies of Eastern and Central Europe, policies for improving the living environment are largely led by compliance with European Union norms and standards aiming for a better quality of life and an improved investment climate. In North America, where mobility is higher than in Europe, a competitive edge is being sought through a combination of economic development strategies for incubating local business opportunities, human resources development, environmental policies and citizen security programmes.

In the developing countries of Africa and Asia, globalization has generated a spectrum of changes that include the emergence of new social actors; the greater importance of cognitive factors in all aspects of social life; the crisis of government and public administration; and the spread of democracy and adoption of new technology. Most of the cities in Africa, Asia, Latin America and the Caribbean are experiencing a distressing spread of social exclusion, economic growth without a corresponding growth in employment, increase in poverty, crisis of food imbalance and environmental degradation.

## Africa

Most city-scale initiatives in Africa involve the expansion of the informal economy. Many initiatives focus on providing affordable housing to disadvantaged groups, targeting proliferating informal settlements. In African cities, provision of secure land tenure in informal settlements is a prerequisite to increasing permanent housing. There is a shift in shelter policies by concerned governments, with more attention being given to infrastructure provision, secure land tenure and support to housing agencies, public and private. Community based organizations (CBOs) are in the forefront in shelter provision, mobilizing community members to participate in improving/constructing their own houses. Most central governments have adopted enabling building codes to make housing standards more affordable. In addition, they are involved in infrastructure provision that has served as an engine behind self-help housing construction. Much new housing stock has been generated through self-help construction efforts.

# On Evidence

## Arab States

Urban environmental concerns in most Arab States stem from domestic and industrial waste that is usually disposed of in an unrestricted manner. Practices in waste management target recycling of reusable by-products. Assimilation of normally shunned garbage collectors into mainstream life has been among major success stories. Urban blight has been arrested in several cities across the Arab States, paving the way for sustainable urban revitalization. Infrastructure provision has been partly privatized, increasing the efficiency of delivery. Infrastructure provision partly financed by the central governments has enabled shelter development of areas in and outside of cities. Integrated urban planning has replaced archaic planning practices that favoured the well-to-do minority in most cities. Plans increasingly accommodate the changing patterns of settlement in favour of low-cost housing. Through revision of building standards, shelter has become affordable with some cities adopting what have come to be known as 'minimum acceptable standards.' And, in some cities credit for adequate housing is being made available to city households through a need-based system.

## Asia and the Pacific

Environmental degradation in informal settlements is a major issue that most cities in the region are facing. Large informal settlements have inadequate means for disposal of sewage and solid waste. Documented practices have managed to arrest and reverse this trend in some cities. There has been an increasing civic participation in infrastructure provision with some local authorities receiving assistance from their citizens through 'People's City Built by the People' initiatives. A sizable number of cities have adopted management practices that augur well for service delivery efficiency. Revision of by-laws and codes to make housing affordable has increased the housing provision goal of many city authorities. Community-based organizations are involved in informal business ventures and provide training enabling their members to make ends meet. These initiatives are usually accompanied by shelter upgrading projects initiated by CBOs. Social inclusion of vulnerable citizens through skills training and micro-financing has greatly reduced poverty levels. In some Asian cities, alternative transport has become popular with the introduction of car-free days and pedestrian pathways. Integrating transport and land use planning, expanding the road networks and maximizing their capacities, managing demand of road usage and providing quality public transport choices has helped reduce traffic congestion in some cities.

## Europe

Despite very different macro-economic and social policies that underlie European approaches, a persistent percentage of the urban population remains unemployed and socially excluded. In Europe, some of the more successful practices in dealing with unemployment focus on finding job opportunities for youth, women and early retirees through training. Environmental services

also present a growth sector where community-based organizations are involved in waste recycling and re-use, creating new job opportunities for socially excluded youth, women and minorities. Community security programmes involve the police, social services, the communities concerned and the architectural and urban design professions. Several consumer associations in Western Europe have partnered with businesses and local authorities to reduce wasteful patterns of consumption and raise awareness of the ecological footprint of cities. In mature cities, basic services problems largely relate to maintaining old infrastructure and integrating new and improved infrastructure with environmental planning and management concerns. A major pre-occupation in Europe is provision of social services for the disabled. Documented practices from Europe focus on issues of decentralization and empowerment, partnership and participation, transparent and accountable management practices and the use of information in decision-making.

## North America

Many North American initiatives are aimed at cleaner energy production. Scores of the documented practices in infrastructure and services in North America seek to address the issue of social exclusion, particularly with regard to immigrants and ethnic minorities living either on the periphery of cities or in inner-city slums. Security of tenure also remains a problem, especially with the gentrification of neighbourhoods and, in some cases, the propensity of local authorities to give up on crime and poverty-ridden public housing estates. Several initiatives are geared towards achieving secure tenure in such neighbourhoods. Others feature partnerships designed to create opportunities for mobilizing resources and for providing solutions to long-standing issues such as unemployment, waste management, infrastructure and basic services.

## Latin America and the Caribbean

Nearly all the environmental practices in Latin America and the Caribbean focus on turning cities into a regional centres, open to the world, that ensure urban development with a high level of environmental quality and good living conditions. With parts of such cities being located in industrial zones it has become increasingly necessary to introduce pollution control without jeopardizing livelihoods. Integrated solid waste management has been widely adopted in cities where it was once a menace. Most documented practices feature housing provision in informal settlements in addition to security of tenure and infrastructure provision. Civic organizations are taking leading roles in advocating for secure tenure for most slum dwellers to allow construction of decent housing. In a number of cities, popular participation in budgeting and planning processes features prominently, with public resource allocation in these cities becoming a democratic process. This, in turn means that all the decisions that are the responsibility of the municipal government on public works and services are decided together with the citizens.

**Access to water** Percentage of households with access to water, access being defined as having water located within 200 meters of the dwelling.

**CBO** Community-based organization; constituted and run by residents, without intermediaries.

**Child mortality** Percentage of female and male children who die before reaching their fifth birthday. It is the number of death for children below five years old during the year divided by the number of live birth during the last five years.

**City product** Total product of the city as defined in national accounts procedures. It may either be taken as the total income or value-added (wages plus business surplus plus taxes plus imports), or the total final demand (consumption plus investment plus exports).

**City Summit** (See: Habitat II)

**Civil society** The aggregate of relationships among individuals that make up social and economic life.

**CO<sub>2</sub> emissions** Human originated carbon dioxide (CO<sub>2</sub>) emissions stemming from the burning or combustion of fossil fuels and the production of cement.

**Developed land** Plots serviced with roads only.

**Eco-efficiency** The concept of eco-efficiency merges ecological and economic goals. In practice, eco-efficiency involves making more and better products from the same amount of raw materials with less waste and fewer adverse environmental impacts.

**Eviction** Average annual number of households removed from rental dwellings and squatter dwellings during the past five years.

**Fertility rate** Average number of children that would be born alive to a woman during her lifetime, if she were to bear children at each age in accord with prevailing age-specific fertility rates.

**Floor area per person** Median floor area per person in square meters.

**Gross Domestic Product (GDP)** The total output of goods and services for final use produced by an economy by both residents and non-residents, regardless of the allocation to domestic and foreign claims. It does not include deductions for depreciation of physical capital or depletion and degradation

of natural resources.

**Gross National Product (GNP)** Comprises GDP plus net factor income from abroad, which is the income residents receive from abroad for factor services (labour and capital), less similar payments made to non-residents who contribute to the domestic economy.

**Habitat Agenda** The main political document -- including a plan of action -- resulting from Habitat II.

**Habitat II** The second United Nations Conference on Human Settlements, held in Istanbul, June 1996; nicknamed the "City Summit."

**Head of household** The notion of head of household assumes that most households are family households (in other words, that they consist entirely, except possibly for domestic servants, of persons related by blood, marriage or adoption) and that one person in such family household has primary authority and responsibility for household affairs and who is, in the majority of cases, its chief economic support. This person is then designated as the head of household.

**Highly developed land** Plots serviced with at least roads, water and electricity and possibly drainage and sewerage.

**Homeless** Person without shelter. These persons usually carry their few possessions with them, sleeping in streets, in doorways, on piers or in some open areas, such as parks.

**Household income** The total income from all sources of all household members, including wages, pensions or benefits, business earnings, rents, and the value of any business or subsistence products consumed.

**Housing in compliance** Percentage of the total housing stock in the urban area that is in conformity with current regulations. It includes only housing that both has a clear title to the land on which it stands, and that is constructed with all required building, land-use, or land subdivision permits.

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

**Human capital** People, whose asset value to society can be enhanced through education, health, security, provision of basic services and guarantees of fundamental rights.

**Human Development Index (HDI)** Composite index developed by the United Nations Development Programme (UNDP), based on three indicators: longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy and the combined first-, second- and third-level gross enrolment ratio; and standard of living, as measured by real GDP per capita (PPPS). Countries, with a few exceptions, are all rated from 0 to 1 along the HDI.

**Informal employment** Percentage of the employed population, men and women, whose activity is part of the informal sector.

**Informal sector** As per the currently definition used by the International Labour Office, "The informal sector consists of persons engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organization, with little or no division between labour and capital as factors of production and on a small scale. Labour relations - where they exist - are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees". The informal sector includes, first, all unregistered commercial enterprises, and second, all non-commercial enterprises that have no formal structure in terms of organization and operation.

**ISO 14001** A set of voluntary international standards that address environmental management systems, environmental auditing, environmental labeling, environmental performance evaluation, and the life cycle assessment. When implemented, these standards ensure consistency in environmental management practice, harmonize national environmental standards within an international framework, simplify registrations, labeling and conflicting requirements, provide a single system for all transnational subsidiaries, and offer guidelines for environmental management excellence.

**Land price to-income ratios** Ratios between the median price of one square metre of highly-devel-

oped, developed and raw land and the median household income per month.

**Least developed countries** Countries recognized by the United Nations as low-income countries, encountering long-term impediments to economic growth, partially low levels of human resource development and severe structural weaknesses.

**Life expectancy at birth** The number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

**Life-cycle approach** Calculation of total discounted costs and benefits over the estimated life of a project or activity. Useful in determining continuing budget implications of one-time capital expenditures.

**Literacy rate** Defined as the percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

**Local government expenditures** Total local government expenditures in US dollars annually, both capital and recurrent, for the metropolitan area, divided by population (three year average). It includes both fixed capital and plant as per the capital account.

**Local government revenue** Total local government sources of funds in US dollars annually, both capital and recurrent, for the metropolitan area, divided by population (three year average). It includes taxes, user charges, transfers, loans, donations and aid.

**Locally-defined poverty-line** 'Absolute' poverty line, taken as the income necessary to afford a minimum nutritionally adequate diet plus essential non-food requirements, for a household of a given size at the city level.

**Median household income** Gross household income from all sources, which includes wages, salaries, incomes from businesses or informal sector activities, investment income, and where information is available, income in-kind such as consumption of agricultural produce that might have been sold.

**Median housing price** The price at which a house would sell if placed on the market for a reasonable

length of time by a seller who is not under pressure to sell. The median-priced house in the urban area is that house that has 50 percent of the houses priced below it, and 50 percent of the houses priced above it. It includes all housing, both new and old, and both formal and informal.

**Median rent** Median contract rent or the amount paid for the property alone and not for utilities such as electricity, heating etc.

**Metropolitan area** The politically defined urban area for planning or administrative purposes that combines all local jurisdictions normally regarded as part of the greater urban area.

**Mortgage loan** Loan from the formal financial sector to a household, with mortgage (i.e. conveyance of property by debtor to creditor as security for debt incurred by the purchase of property).

**Mortgage-to-credit ratio** Ratio of total mortgage loans to all outstanding credit in both commercial and government financial institutions.

**Municipal waste** Waste collected by municipalities or by their order that has been generated by households, commercial activities, office buildings, schools, government buildings and small businesses.

**NGO** Non-governmental organization.

**Non-mortgage loan** Loan from the formal or informal financial sector to a household, conveyed without mortgage for purchasing houses.

**Official development assistance (ODA)** Grants or loans to countries or territories that are undertaken by the official sector, with promotion of economic development and welfare as the main objective, at concessional financial terms.

**Participatory urban governance** The relative degree to which citizens are involved in local policy development, planning, programming, budgeting, service delivery and monitoring.

**Peri-urban** Developing area just beyond the established built up parts of a city; urban periphery.

**Permanent dwelling** Dwelling units that are 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).

**Poor households** Percentage of households situated below the poverty line (national or locally-defined poverty line).

**Price of water** Median price paid per 1,000 liters of water in US dollars, at the time of year when water is most expensive. This measures the cost of water at times when it is most scarce.

**Primary education** Education at the first level, the main function of which is to provide the basic skills for further learning.

**Purchasing power parity (PPP)** At the PPP rate, one dollar has the same purchasing power over domestic GDP that the US dollar has over US GDP. PPP could also be expressed in other national currencies or in special drawing rights (SDRs). PPP rates allow a standard comparison of real price levels between countries, just as conventional price indexes allow comparison of real values over time; otherwise, normal exchange rates may over- or undervalue purchasing power.

**Raw land** (or under-developed land) Unserviced plots with or without planning permission.

**Refugees** People who have fled their countries because of fear of persecution for reasons of their race, religion, nationality, political opinion or membership in a particular social group, and who cannot or do not want to return. (We may wish to also explain the concept of economic refugee here)

**Rental default** Missed-payment to owner for occupancy of house; violation of legal agreement specifying conditions of use and payment; can be grounds for forced eviction.

**Rent-to-income ratio** Ratio of the median annual rent of a dwelling unit and the median annual household income of renters.

**School enrolment (gross enrolment ratio)** Number of students enrolled in a level of education, regardless of age, as a percentage of the population of official school age for that level.

**Secondary education** Education at the second level based on at least four years of previous instruction at the first level and providing general or specialized instruction or both, such as middle school, secondary school, high school, teacher training school at this level and vocational or technical school.

**Social capital** The working product of interpersonal networks, contacts, knowledge and related human resources; assets that individuals and groups can apply to a wide range of needs and interests.

**Squatter** A person or household in housing with no title to the land on which it stands; squatters may pay or not pay rent.

**Sustainability** Meeting the needs of the present generation without compromising the ability of the future generations to meet their own needs; keeping the consumption of natural resources, material and energy within regeneration and substitution limits; polluting the air, land and water only within limits that can be comfortably tolerated by people, buildings, wildlife and plants.

**Tenure** Rights, restrictions and responsibilities people have with respect to land and property; forms of tenure include ownership, lease-hold, and different types of common, communal or customary tenure.

**Tertiary education** Education at the third level such as universities, teacher colleges and higher-level professional schools - requiring as a minimum condition of admission the successful completion of education at the second level or evidence of the attainment of an equivalent level of knowledge.

**Travel time** Average time in minutes for a one-way work trip, as an average over all modes of transport.

**Under-five mortality rate** Percentage of female children and male children who die before reaching their fifth birthday. It is equal to the number of deaths for children below five year old during the year divided by the average number of live birth during the last five years.

**Unemployment** Average proportion of unemployed (men and women) during the year, as a fraction of the (formal) workforce. As per the currently definition used by the International Labour Office, the unemployment rate is defined, mathematically, as the quotient resulting from dividing the total unemployed (for a country or a city) by the relevant labour force, which itself is the sum of the employed and the unemployed.

**Urban agglomeration** The city proper along with the suburban fringe and any built-up, thickly settled areas lying outside of, but adjacent to, the city boundaries.

**Urban population** Percentage of the population living in urban areas as defined according to the national definition used in the most recent population census.

**Urban** Whether or not a place is 'urban' is determined by national statistical definitions, practices and standards; around the world it can vary from a minimum of 500 to a minimum of 50,000 persons.

**Urbanization** The process - including rural to urban migration, direct immigration from foreign countries, and natural population increase - by which cities capture an increasing proportion of the nation's total population

**Waste recycling** Reuse that diverts material from the waste stream, except for recycling within industrial plants and the reuse of material as fuel. The recycling rate is the ratio of the quantity recycled to the apparent consumption.

**Wastewater treated** Percentage of all wastewater undergoing some form of treatment. Forms of treatment include primary treatment, which screen and sediment sewage to remove grosser debris; secondary treatment, which reduce Biological Oxygen Demand (BOD) to acceptable levels by microbial oxidation using activated sludge or a trickle filter; tertiary treatment, which reduce BOD still further through micro-straining or filtering, the microbial removal of phosphates and nitrates, and disinfection using chlorine or ozone.

**Water consumption** Average consumption of water in liters per day per person, for all domestic uses (excludes industrial).

**Water withdrawals** Includes those from renewable aquifers and desalting plants but does not include losses from evaporation.

**Woman-headed households** A household headed by a woman who has the primary authority and responsibility for the household's affairs, usually as chief economic support. However, in most countries, women are not usually enumerated as heads of households unless they are either living alone (that is, in one-person household) or there is no adult male in the household.

# Endnotes

## A world of cities

### A World of Light and Dark

1. United Nations Population Division, World Urbanization Prospects: The 1999 Revision.
2. The Urban Future 21 - Chapter II: Trends and Outcomes, The Urban World of 2025.
3. Ibid. p.6.

### An Urbanized World

1. The HDI is a composite of three basic components of human development: longevity (life expectancy); knowledge (adult literacy and years of schooling); and standard of living (purchasing power).  
[www.undp.org/hdro/anatools.html](http://www.undp.org/hdro/anatools.html)
2. These are urban agglomerations, defined as: The city proper along with the suburban fringe and any built-up, thickly settled areas lying outside of, but adjacent to, the city boundaries.
3. Because analyses of urban indicators are statistically more useful for policy when clustered by "cultural realm", "Africa" in this report refers to the Sub-Saharan region. Northern African states are included in the Arab States region for analytical purposes only.
4. Louise Nystrom, City and Culture Introduction, [www.stadsmiljoradet.boverket.se/eng/ccintro.html](http://www.stadsmiljoradet.boverket.se/eng/ccintro.html), 2000.
5. Ray Suarez, panel moderator for The Future of the City in an email interview, <http://future.philly.com/interact/suarez.html>, 2000.
6. The World Bank, *Regions: Europe and Central Asia*, [www.worldbank.org/ecspf/ecsin/urban98.html](http://www.worldbank.org/ecspf/ecsin/urban98.html), 1998.

### Globalization, Cities and the Urban Poor

1. **Absolute poverty** is a threshold of income or consumption below which an individual or household cannot obtain the minimum diet plus an amount of other basic needs, including shelter. **Relative poverty** refers to the individual or household consumption or income in relation to the average for others in the society. Poverty can also be described in terms of factors that impede breaking free from the state of poverty.

2. Jeff Faux, *Toward a Global Social Contract: The politics of the global economy* (speech), [http://www.epinet.org/webfeatures/viewpoints/mexico\\_grand\\_bar gain.html](http://www.epinet.org/webfeatures/viewpoints/mexico_grand_bar gain.html)

3. UNCHS (Habitat), *Human Settlements Conditions and Trends in Asia and the Pacific*, draft working paper prepared for the ESCAP meeting on Istanbul+5, 19-22 October 2000.

### A Tale of 2 Cities

1. The popular children's story, *The Wonderful Wizard of Oz*, written by L. Frank Baum in 1900 is an allegorical portrayal of the political economy of this period in American history.
2. Bruce S. Jansson, *The Reluctant Welfare State: A History of American Social Welfare Policies*, Belmont, California: Wadsworth Publishing Company, 1988.
3. Lincoln Steffens, *The Shame of the Cities*, New York: Hill and Wang, (reprinted) 1957.

## Urban shelter

### Housing

1. Due to a trend in the vast majority of countries towards smaller household sizes.
2. During the 2015-2020 period the figure is expected to increase to some 25 million per year.
3. This includes all those also without access to basic infrastructure and services.
4. UNCHS (Habitat), 1999, "Basic Facts on Urbanization", Nairobi.
5. UNCHS (Habitat) Urban Indicators Programme, 1998 data.
6. UNCHS (Habitat) Urban Indicators Programme, 1998 data.
7. UNCHS (Habitat) and ILO. 1995. Shelter Provision and Employment Generation, Nairobi. p. 29.

### Security of Tenure

8. *The Mystery of Capital*, H. de Soto, New York, 2000, p.20.

### Housing Finance

9. See [www.grameen-info.org](http://www.grameen-info.org)
10. See [www.ucdo.thai.com](http://www.ucdo.thai.com)
11. ESCAP/UNCHS Joint Section on

Human Settlements, Guidelines on Community-based Housing Finance and Innovative Credit Systems for Low-income Households, Bangkok 1991.

### Basic Services

12. Towards Water Security: A Framework for Action, adopted at the Second World Water Forum, The Hague, March 2000.

## Urban society

### Security

1. [The age of reference for youthful delinquency has decreased to 12 years].

## Urban environment

### Consumption

1. UNDP, *Human Development Report 1998: Overview*, [www.undp.org/hdro/e98over.html](http://www.undp.org/hdro/e98over.html)
2. *Economic Instruments and Regulatory Measures for the Demand Management of Urban Transport*, UNCHS, 1995
3. Zsuzsa Balogh and Zsuzsa Lehoczki, "Product Charge in Packaging in Hungary," in *Economic Instruments for Environmental Management*, London: Earthscan/UNEP, 2000.

### Pollution

1. World Development Indicators, 2000, World Wide Web: <http://www.worldbank.org/wdi>.
2. OECD Environmental Data, 1997.

## Urban governance

### Finance

1. Robert B. Kent (1980): "Local Revenue Generation: Property Taxes, Land Registration and Cadastral Mapping" (Local Revenue Administration Project Maxwell School, Syracuse University).

### Corruption

2. With the addition of the ethical denominator, this formula resembles the elemental conflict between good and evil in nearly every important story ever told.
3. Lincoln Steffens, *The Shame of the Cities*, McClure, Phillips and Company, 1904. pp. 1-18.

## Epilogue

1. The database used for this report includes data for 151 cities worldwide. The Global Urban Indicators Database is being supplemented and will soon include data for 216 cities.